



At Rickleham in the romantic vale
 of Korbury near Dorkens is an inn
 much frequented by Botanists for the
 beauty of the surrounding scenery
 and the rare plants to be found in
 the neighbourhood —

Take Specimen 2nd

— All size of 2nd

Tit. Hydrant. 81 —



Eleocharis Salustrii - May ^{to} around the stems are
scated three long sets with small procep.
turned downward thus



Carex vulpina) - Pollen trigonal
Male bractea pointed & sometimes
bifid -
Female pointed, besides which is a
2426 - corolla of two petals - seed (nearly) glen
Most of the female spikelets have a
bract of males at the point -
There is an urn toothed at the mouth which
gradually grows over the ovary the style of
which at last have just room to pass thro' its tooth
mouth

For the author's a great little plant
growing on rocks



25336

35

1/2 L 0
1/2

Christchurch
1910
27

THE
BRITISH FLORA,
OR
A LINNEAN ARRANGEMENT
OF
BRITISH PLANTS.

WITH THEIR
GENERIC AND SPECIFIC CHARACTERS,
SELECT SYNONYMS,
ENGLISH NAMES,
PLACES OF GROWTH,
DURATION,
TIMES OF FLOWERING,
AND
REFERENCES TO FIGURES.

~~~~~  
BY JOHN HULL, M. D.

Member of the Corporation of Surgeons, and of the Physical Society of London;  
of the Natural History Society of Edinburgh; and Secretary of the Literary and  
Philosophical Society of Manchester.

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PART I.

Manchester,

PRINTED AT 9, SPRING-GARDENS, BY R. AND W. DEAN
(Successors to Mr. G. Nicholson).

And Sold by R. Bickerstaff, Strand, London; W. Mudie, Edinburgh; and
I. and W. Clarke, Manchester.

1799.

ASIO IN THE FUTURE

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[illegible]

33

22 JAN 1951



THE END OF THE LINE

RECEIVED 20 JUL 1961

11. 2. 7. 2. 1. 2.

THE UNIVERSITY OF CHICAGO

1875

TO THE
REV. W. BARTON, A. B. M. D.

THIS VOLUME IS INSCRIBED,
AS A TESTIMONY OF AFFECTIONATE REGARD,
AND
AS AN ACKNOWLEDGMENT OF THE
PLEASURE AND ADVANTAGE,
DERIVED FROM HIS SOCIETY, IN NUMEROUS
BOTANICAL EXCURSIONS,

BY HIS SINCERE FRIEND,

THE AUTHOR.

Brazen-Nose Street,
Manchester, Jan. 1, 1799.

TO THE

REV. W. HARTON, A. B. D. D.

THIS VOLUME IS INSCRIBED,

AS A TESTIMONY OF AFFECTION AND RESPECT,

AND

AS AN ACKNOWLEDGMENT OF THE

GENUINE AND VALUABLE

CONTRIBUTION TO THE SCIENCE OF

BOTANICAL EXCURSIONS,

BY HIS SINCERE FRIEND,

THE AUTHOR.

P R E F A C E.

The numerous corrections and additions, which the catalogue of British plants has of late received, in consequence of the prevailing taste for botanical pursuits, having rendered the *Enchiridion Botanicum* of Broughton, and all similar publications, very insufficient for the purposes of the practical botanist, the Author was induced, in the beginning of last year, to prepare the volume, now offered to the publick, for the press.

Had he then been apprized, that a *Pocket Flora* would so soon appear by another hand, he would have relinquished his undertaking; but having nearly completed the work, before the *Synopsis* of Mr. Symons was announced for publication; and finding that work written in the Latin language, less comprehensive in its plan, and not continued through the three last Orders of the Class *Cryptogamia*, he could not consider it, as superseding the necessity of this volume; which, he flatters himself, will prove an useful companion in a botanical excursion.

In the *Catalogue* here given will be found all the *Species* contained in the third edition of Dr. Withering's very valuable work on the botany of these kingdoms, together with such ad-

ditional ones, as have been since discovered and ascertained. All the *Varieties* also are given, except those depending merely upon size, or colour.

In the *Arrangement* the Author has adhered strictly to the method established by the justly celebrated Linnæus, in preference to the reformed system of Professor Thunberg; although this has been adopted on the continent, by Haenke in his edition of the *Genera Plantarum*, and by Willdenow in his *Floræ Berolinensis Prodrômus*; and in this kingdom by Sibthorpe, Withering, and Symons. That he may not unnecessarily add to the size of this volume, he will assign his reasons for this, and give some observations on the botanical language, here employed, in the Preface to a work, containing an Introduction to Botany, and the Natural Characters of the Genera of British Plants, which is now in the press; and will content himself with giving here the following short statement of the plan of the British *Flora*.

The *Genera* are numbered in the same manner, as in Reichard's edition of the *Genera Plantarum*, and the fourteenth edition of the *Systema Vegetabilium*, published by Murray, at Göttingen, in 1784.

The *Characters* are in general translated from the works of Linnæus, and chiefly from the *Systema Vegetabilium*. Where Linnean characters are wanting, the deficiency has been supplied from the works of Hudson, Lightfoot, Withering, Dickson, Smith, the Linnean Transactions, &c. &c. With these are occasionally given some additional distinctive marks, either included in a parenthesis, or subjoined as an observation.

To each *Species* is added,

1. The *English Name*; except in the three last orders of the Class Cryptogamia, where they have been almost universally omitted, because they are mere translations, and not properly established.

2. The *General Habitation*, or *Situation*; in which it is found,

and in some instances where the plant is very rare, the particular place is indicated.

3. The *Duration*; which is expressed by the initials of the words Annual, Biennial, Perennial, Shrub, Tree.

4. The *Season*, or *Months of Flowering*; the months being expressed by numbers, e. g. January by 1, February by 2, &c. &c.

5. A *Reference to some Figure, or Figures*. In general one figure only is referred to, and in some instances an inferior English figure has been preferred to a superior foreign one, as being more accessible to the generality of readers. When two or more are given, the first place has not always been assigned to the best.

The *Synonyms* of Hudson, Lightfoot, and Withering, are also constantly added, when they differ from the Linnæan name, or from each other. And the *Synonyms* of other authors are frequently given, especially in the Class Cryptogamia.

To such species as are *doubtful natives*, a note of interrogation is affixed.

ABBREVIATIONS.

Flor.	Floret.	Androg.	Androgynous.
Flow.	Flower.	Polyg.	Polygamous.
Cal.	Calyx.	Var.	Variety.
Cor.	Corol.	Spr.	Spring.
Pet.	Petal.	Sum.	Summer.
Nect.	Nectary.	Aut.	Autumn.
Stam.	Stamen.	Col.	Colour, or coloured.
Filam.	Filament.	Com.	Common.
Anth.	Anther.	Mount.	Mountain, mountainous.
Pist.	Pistil.	Past.	Pastures.
Germ.	Germen.	Calc.	Calcareous.
Stig.	Stigma.	Seash.	Sea-shore.
Fr.	Fruit.	Pl.	Places.
Fructif.	Fructification.	Sit.	Situations.
Papp.	Pappus.	Gr.	Ground, or grass.
Caps.	Capsule.	Fol.	Foliage.
Pan.	Panicle.	Head.	Headed.
Recept.	Receptacle.	Grav.	Gravelly.
Spikel.	Spikelet.	Cornfi.	Cornfields.
Invol.	Involucre.	Riv.	River, or rivulets.
M.	Male.	Plant.	Plantations.
Fem.	Female.	Mead.	Meadows.
Herm.	Hermaphrodite.		

CATALOGUE

Books referred to in this Work.

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Allion. stirp. Allionii Rariorum Pedemontii Stirpium Specimen. 1755. 4to.
Barr. Barrelieri Plantæ per Galliam, &c. 1714. fol.
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Ray syn. J. Raii Synopsis Methodica, &c. Ed. 3. 1724. 8vo.
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Relh. sup. Ejusdem Supplementa 3.
Retz. Retzii Observationes Botanicæ. fol. fasc. 6.
Schæf. Schæfferi Fungorum qui in Bavaria, &c. 4to. tom. 4.
Scheuch. Scheuchzeri Agrostographia, &c. 4to.
Scheuch. prod. Agrostographiæ Helveticæ Prodrumus. 1708.
Schmid. Schmidel Icones Plantarum, &c. fol.
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Schreb. Fl. Lips. Schreberi Spicilegium Floræ Lipsiæ. 8vo.
Scop. Scopoli Flora Carniolica, &c. 1772. 8vo. tom. 2.
Scop. subt. Scopoli Plantæ Subterraneæ. 12mo.
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Sibth. Sibthorp Flora Oxoniensis. 8vo.
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Sp. Pl. Linnæi Species Plantarum. Ed. 2. 8vo. tom. 2.
Stackh. Stackhouse Nereis Britannica. fol. fasc. 2.
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Weis. Plantæ Cryptogamicæ Fl. Gotting. 1770. 8vo.
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With. Withering's Arrangement of British Plants. Ed. 3.
 1796. Vol. 4. 8vo.
Willden. C. L. Willdenow Floræ Berolin. Prod. 8vo. 1787.

Character of the Genera are taken from a pair of Fructification
 of Species from leaves, stem, and root—
 Difference of colour shews variety in the same species; thus if we
 sow the seeds of a white lilack it will produce individuals whose
 flowers are some of them white, and others violet—

CLASS I.

MONANDRIA.

MONOGYNIA.

10. SALICOR'NIA. Calyx 1-leaved. Corol none.
 12. HIPPU'RIS. Cal. none. Corol none.
 (III. *Valeriana rubra*. IV. *Aphanes*. XX.
Zo. tera. Ophrys spiralis. & ovata. XXI.
Chara. XXII. *Salix monandra*.)

Obs. The figures III. IV &c. prefixed to *Valeriana*,
Aphanes, &c. denote the Classes, in which they are ar-
 ranged.

DIGYNIA.

13. CALLIT'RICHE. Calyx none. Corol 2-petalled.
 Capsule 2-celled.

TETRAGYNIA.

(XXI. *Zanichellia*.)

MONOGYNIA.

10. SALICOR'NIA. Cal. ventriculous, entire. Pe-
 tals none. Seed 1.
 1. S. Joints thicker at the summit, compressed, *europaea*.
emarginato-bifid. HUDS.
 Var. 1. *annua. & herbacea* HUDS. Joints com-
 pressed, emarginate; internodes obconical,
 branches opposite, spikes cylindrical. (*Flow-
 ers three near together, on both sides of the
 joints*. BASTER.) S. *annua*. Smith. S. *her-
 bacea*. Lin. Lightf. With. See Ray syn. 136. 1.
Marsh Samphire. Sea shore. A. 8. 9. E.B. 415.
 — 2. *β*. HUDS. Erect, branches short, cy-
 press-form. DILL. in Ray syn. 137. 5.
 — 3. *γ*. *fruticosa* HUDS. Perennial, more
 shrubby, procumbent. RAY syn. 136. 2.

Var. 4. δ . Huds. Mouse-tail like, procumbent, shoots very long. DILL. in Ray 137. 4.

— 5. σ . Huds. More branched, procumbent, branchlets short, purplish. DILL. in R. 137. 4.

Obs. Dr. Smith is of opinion, that the above varieties are specifically distinct. ENGLISH BOTANY, page 415.

11. HIPPU'RIS. Cal. 0. Pet. 0. Stigma simple. Seed (Nut) 1. (Calyx superior, very minute. Car. 0. Stamen inserted in the pistil. Seed 1. Willden.)

vulga'ris. 1. H. Leaves 8 (—13) together.

Common Mare's-tail. Ditches, &c. P. 4—6. Curtis.

Obs. Hippuris is considered as gynandrous by Willdenow, and Sibthorp, and if we admit the Linnean character, with great propriety, as the stamen must necessarily arise from some part of the pistil; but we are informed by Schreber, that the germen is crowned by a small calyx with a 2-lobed margin, within which the stamen is inserted. See Genera Plant. page 8. Curtis has occasionally found female flowers upon this plant.

DIGYNIA.

13. CALLIT'RICHE. Cal. 0. Pet. 2. Caps. 2-celled, 4-seeded.

aquat'ica. 1. CALLITRICHE. Huds. Sibthorp.

*upper leaves in form of ** Var. 1. *verna* σ . Huds. Sibth. Upper leaves oval, flowers small white. *Stems weak & numerous.* With. Relh. See Ray syn. 289. 1.

Vernal Stargrass. Ditches. A. 4—8. Dill. Giss. 6.

Var. 2. *terrestris* β . Huds. Sibth. All the leaves oval, roundish, or cuneiform, petioled, flowers androgynous, or polygamous. See Ray syn. 289. 2.

— Moist places. 4—8. F. Dan. 129. Col. ecphr. 316.

— 3. *autumnalis* γ . Huds. Sibth. All the leaves linear, bifid at the end, flowers (not always) hermaphrodite. C. *autumnalis* Lin. With. Relhan.

See Ray syn. 290. 3.

Autumnal Stargrass. Still waters. A. 5—9. Pet. 6. 4.

Obs. The figure of the leaves varies, according as the plant is more or less completely submersed, &c. thus Var. 1. passes into Var. 2. when growing in moist places, which have been overflowed in the winter; and in the botanic garden at Oxford has been observed to change into Var. 3.; so that however different the plants, belonging to this genus, may appear in the form of their leaves, mode of fructification, or time of flowering, there is not any good ground for considering them, as specifically distinct. — Hudson has transferred Callitriche to the Class Polygamia.

CLASS II.

DIANDRIA.

MONOGYNIA.

(III. *Schænus albus*, & *mariscus*. XV. *Lepidium ruderale*. XX. *Orchis*. *Satyrium*. *Ophrys*. *Malaxis*. *Serapias*. *Cypripedium*. XXI. *Lemna*. XXII. *Salix*. XXIII. *Fraxinus*.)

1. Flowers inferior, 1-petalled, regular.

18. *LIGUS'TRUM*. Cor. 4-cleft. Berry 4-seeded.

2. Flowers inferior, 1-petalled, irregular.

A. Fruit capsular.

25. *VERO'NICA*. Cor. Limbus 4-parted, lowest segment narrower.

30. *PINGUIC'ULA*. Cor. ringent, spurred. Cal. 5-cleft.

31. *UTRICULA'RIA*. Cor. ringent, spurred. Cal. 2-leaved.

B. Seeds naked.

32. *VERBE'NA*. Cor. nearly equal. Cal. highest segment shorter.

33. *LY'COPIUS*. Cor. nearly equal. Stam. distant.

39. *SAL'VIA*. Cor. ringent. Filaments fixed transversely on a pedicel.

(I. *Salicornia*.)

3. Flowers superior.

24. *CIRCÆ'A*. Cal. 2-leaved. Cor. 2-petalled. Pet. obcordate.

DIGYNIA.

42. *ANTHOXAN'THUM*. Cal. glume one-flowered, oblong. Cor. glume awned.

(IV. *Bufonia*. XX. *Serapias*. XXI. *Carex atrata*.)

DIANDRIA. MONOGYNIA. Ligustrum.

MONOGYNIA.

{ Calyx of one leaf 38. LIGUSTRUM. Cor. 4-cleft. Berry (2-celled)
tubular, small, 4 teeth 4-seeded.

vulga're. 1. L. Leaves lanceolate, acute, pedicels of the panicle
leaves dark green opposite. (Leaves ovate, obtuse, panicle simply
trichotomous. THUNB.)

Flowers white. Privet. Hedges. S. 6. 7. Curt. 300.

Stem herbaceous, rarely shrubby segm. narrower. Caps. 2-celled, emarginate.
leaves opposite or verticillate calyx 4-toothed
1. Spiked.

f²
Stem 2 high spica'ta. 1. V. Spike terminating, leaves opposite, crenate, ob-
tuse, stem ascending, very simple. (Stam. much
longer than the corol, orifice of the tube of the
leaves minutely knotted corol bearded.)

Spiked Speedwell. Mount. pastures. P. 6. E. Bot. 2.

f²
Stem 1 high hy'brida. 2. V. Spikes terminating, leaves opposite, obtusely
serrated, rough, stem erect. V. spicata β. hybrida
Flowers small, blue. Huds. On Craig Breidden in Wales.
Welch Speedwell. On rocks, &c. P. 7, Ray 11.

officina'lis. 3. V. Spikes lateral, peduncled, leaves opposite, stem
procumbent. Hairy

Flowers blue, round Common Speedwell. Hedge-banks. P. 5—8. Curtis.

leaves reverse oval
fairy rough
[leaves substituted for tea, but are rather too bitter & astringent.]
Obs. V. arvensis & verna are referred to this division by With-

ering.
2. Corymboso-racemous.

f²
Spike crowded alpina. 4. V. Corymb terminating, leaves opposite (ovate,
leaves oblong 3 ribbed smooth, serrulated), calyxes hispid. (Stem sim-
ple, ascending. E. Bot.) Flowers blue
dark green, shining Alpine Speedwell. Ben Nevis. P. 7—8. E. Bot. 484.

f²
Stem much saxat'ilis. 5. V. Corymb terminating, leaves opposite, smooth-
branched leaves ellip. ish (nearly ovate, somewhat crenate), peduncles
dark green flowers 3 or 5 longer than the floral leaves.

large violet, with red mouth — Ben Lawers. DICKSON. S. 6. 7. F. Dan. 342.

f²
Stem creeping lia. serpyllifo'-6. V. Raceme terminating, somewhat spiked, leaves
ovate, smooth, crenate (3-fibred, stamens scarcely
longer than the corol).

Flowers pale blue Smooth Speedwell. Pastures, &c. P. 5. Curtis.

in loose lateral spikes humifu'- 7. V. Raceme terminating, leaves cordate, but round-
ish, slightly crenate, stems creeping. Dicks.

Flowers few sa. — — — Mountains of Lochaber, &c. — — —

rounded, blue stem prostrat Beccabun'-8. V. Racemes lateral, leaves ovate, flat, stem
ga. creeping. Stem creeping.

Flowers blue in Brooklime. Shallow streams, P. 6. Curt.

loose spikes

* *Veronica Chamædrys* - leaves substituted for those of the more grateful than *V. officinalis*,

DIANDRIA, MONOGYNIA, Veronica:

9. V. Racemes lateral, leaves lanceolate, serrated, *Anagal'lis*.
stem erect. *Flowers pale purple in lateral branches,*
numerous.
Water-red. Old pits, &c. A. 6-8. Curt.
10. V. Racemes lateral, alternate, pedicels pendu- *scutella'ta*.
lous, leaves linear, very entire. (Racemes *stem 1 ft. high*
slender, wide-spreading, thinly set with *Flowers few*
flowers. WITH.) *on slender foot stalks, purple, a white* }
Narrow-leav. Sp. Boggy places. P. 6-8. Curt.
11. V. Racemes lateral, few-flowered, calyxes hir- *monta'na*. *Stalks* }
sute, leaves ovate, wrinkled, crenate, petiol- *weak, 1 ft. high* }
ed, stem weak. *lateral pale blue flowers on foot stalks,*
Mountain Speedwell. Woods. P. 5-6. Curtis. 5 or 6 on each bunch.
12. V. Racemes lateral, leaves ovate, sessile, wrink- *Chama'*. *Stem erect*
led, toothed, stem with two opposite rows of *arys. Pinch. high*
hairs. (Calyx-leaflets unequal, lanceolate.) *Flowers, large blue*
Wild Germander. Hedge-banks. P. 5. Curt. in lateral bunches
3. Peduncles 1-flowered. *leaves pale green **
13. V. Flowers solitary, leaves (petioled) cordate, *agres'tis*. *Stems*
incised, shorter than the peduncle. (Calyx- *5 or 6 inches high*
leaflets ovate, equal.) *Flowers solitary, blue.*
Germander. Pastures, &c. A. 4. Curtis.
14. V. Fl. solitary, leaves cordate, incised, longer *arven'sis*. *Root* }
than the peduncle. (Calyx-leaflets lanceo- *of many small* }
late, unequal. GOUAN. Spike terminating, *Fibres* - }
leaves cordate, sessile, floral leaves lanceolate, *stem 4 inches*
longer than the flowers. WITH.) *Flowers, pale blue.*
Wall Speedwell. Old walls, &c. A. 5. Curt.
15. V. Fl. solitary, leaves cordate, flat, 5-lobed. *hederæfo'*
Ivy-leaved Sp. Hedge-banks, &c. A. 4. 5. Curt. lia. Flow. blue
16. V. Fl. solitary, leaves digitate-parted, pedun- *triphyll'los*.
cles longer than the calyx. *Flowers single, blue*
Trifid Speedwell. Sandy fields. A. 4. 5. Curt. solitary
17. V. Fl. solitary, leaves digitate-parted, pedun- *ver'na*.
cles shorter than the calyx. (Spike termina- *stem upright 6 in. high*
ting. WITH.) *Flowers blue solitary*
Vernal Speedw. Old walls, &c. A. 4. 5. E. Bot. 25.
30. PINGUI'ULA. Cor. ringent, spurred. Cal.
2-lipped, 5-cleft. Caps. 1-celled.
1. P. Nectary thickest at the end. (Nect. obtuse, *lusita'nica*,
shorter than the petal, scape hairy, capsule
globular. E. Bot.) P. *villosa*. Lightf. tab. 6.
— Marshes. P. 6. 7. E. Bot. 145.
2. P. Nectary cylindrical, as long as the petal. *vulga'ris*.
(Capsule ovate. SMITH.) *Stems downy, 3 inches high*
Common Butterwort. Bogs. P. 5. 6. E. Bot. 76.
Flowers resemble violets. Leaves thick, white
on the under side - Warm reindeer milk steamed
this the leaves and left for a day or two to turn brown
is coagulated, without any separation of cream or curd
but not cows milk - Juice kills lice & heals chaps in cows & such

Linopis europaeus - Root assurgent, juice stains the flesh brown; gives a durable stain to linen, woollen, and silk; and dyes a black with green eriod.

6

DIANDRIA MONOGYNIA Pinguicula.

Var. 2. Leaves lanceolate, obtuse, length more than four times greater than their breadth.

Obs. I found several of these plants last autumn about three miles from Buxton, on the right-hand side of the road leading to Disley, and gave two of them to a friend; they both lived and flowered, but unfortunately all the scapes were destroyed by a cow except one, and the flower of that was so much injured, when I saw it, that I cannot give so perfect a description of it, as I could wish. The scape was about five inches high, villous above, smooth below; corol less, more oblong, the segments bluer than in *Ping. vulgaris*; nect. cylindrical. The leaves more than three inches in length, and about six eighths of an inch in breadth.

31. UTRICULARIA. Cor. ringent, spurred. Cal. 2-leaved, equal. Caps. 1-celled.

vulgaris. 1. U. Nectary conical, scape few-flowered. Greater Bladdersnout. Wet ditches. P. 8. E.B. 253.

minor. 2. U. Nectary keeled. Less Hooded-Milfoil, &c. Pits. P. 6. 7. E.Bot. 254.

32. VERBENA. Cor. funnel-shaped, nearly equal, curved. Cal. one tooth truncated. Seeds 2, or 4, naked. (Stam. 2 or 4.)

officinalis. 1. V. Tetrandrous, spikes filiform, paniced, leaves multifido-laciniated, stem solitary.

small, simple Vervain. Road-sides. A. 8. 9. Curtis.

mouth fringed 2-cut 23. LYCOPUS. Cor. 4-cleft, one segment emarginate. Stam. distant. Seeds 4, retuse.

flowers europaeus. 1. L. Leaves sinuato-serrated.

small and white Water Horehound. Banks of streams. P. 7. 9. Curt.

leaves serrated, the stem purple Var. 2. Jagged. Leaves deeply divided. Barr. 154.

at the joint calyx downy - flowers hairy 39. SALVIA. Cor. unequal. Filam. fixed transversely on a pedicel.

pratensis. 1. S. Leaves cordato-oblong, crenate, upper leaves embracing the stem, verticils almost naked, cor. helmet glutinous. *Whites soft flower*

large, simple, or distinct whorls Meadow Clary. Meadows. P. 6. 7. E.Bot. 153.

Verbenae. 2. S. Leaves sinuated, serrated, smoothish, corols narrower than the calyxes. *Calyx hairy*

Flowers 2 ft. ca. Wild Clary. Meadows, &c. P. 6. E. Bot. 154.

Flowers small blue, in whorls 24. CIRCEA. Cor. 2-petalled. Cal. 2-leaved, superior. Caps. 2-celled.

racemosa. 1. CIRCEA. *racemes*

Root creeping, leaves dark green Var. 1. *lutetiana*. Stem erect, racemes several, leaves ovate (ovato-lanceolate, somewhat serrate)

calyx hairy *Salvia officinalis* - aromatic, used in cooking, also diuretic in potent drink as an emmenagogue, and has been employed in palsy, gidiness, trembling, and other nervous affections

ted, tomentous, opaque). *C. lutetiana*. Lin.

Huds. With.

Inchanter's Nightshade. Shady pl. P. 6. 7. Curt.

Var. 2. *alpina*. Stem prostrate, raceme single, *Scents of flowers red*
leaves cordate (toothed, shining. Plant small). *leaves pale green*

C. alpina. Lin. Huds. With.

Mount. Inch. N. Mount. P. 7. H. ex. v. 34. 3. 1.

Obs. My friend Mr. Robson, to whom I am indebted for several valuable communications, has ascertained by cultivation, that *C. lutetiana* and *alpina* are not specifically distinct: hence it will no longer appear surprizing, that it was found so extremely difficult to point out any certain marks of difference in them.

DIGYNIA.

42. ANTHOXANTHUM. Cal. Glume 2-valved,
1-flowered. Cor. Glume 2-valved, acumin-
minate. Seed 1.

1. A. Spike oblong, ovate, florets longer than the awn, somewhat peduncled.

Spring Grass. Meadows. P. 546. Curt. Marl. 236

Culm slender white. Inches long.

Spikes loose and yellowish woolly.

Florets longer than the beard.

Verbena officinalis - Cor. cephalic, slightly astringent, decedent
used in blood and engorged arteries and other obstructions
of the vessels, and as a gentle cathartic.

Silva Galiana - Seeds in water acquire a thick mucilage
around them, used to pick into the eyes to get out substances
that have flown into them.

Talvia verberna - Seeds in water acquire a mucilaginous mass
like so that they are used like those of meadow clays to extract
substances from the eyes.

24. PULFARIAS. Cal. 2-valved, valves keeled, equal.

25. PULFARIAS. Cal. 3-valved, the third dorsal leaf.

26. PULFARIAS. Cal. 3-valved, the third dorsal leaf.

CLASS III.

TRIANDRIA.

MONOGYNIA.

1. *Flowers superior.*

44. VALERIA'NA. Cor. 5-cleft, gibbous at the base.
Seed 1.
55. CRO'CUS. Corol. 6-petaloid, erecto-patulous.
Stigmas convolute, coloured.
59. I'RES. Corol. 6-petalled, the alternate petals
spreading. Stig. petaloid.
56. IX'IA. Cor. 1-petalled, tubular; tube straight,
filiform, limbus 6-parted, equal.

2. *Flowers grass-like, calyxes glumose, with valves.*

65. SCHÆ'NUS. Cor. o. Cal. chaffy scales, fascicled.
Seed roundish.
66. CYPE'RUS. Cor. o. Cal. chaffy scales, 2-rowed.
Seed naked.
67. SCIR'PUS. Cor. o. Cal. chaffy scales, imbrica-
ted. Seed naked.
68. ERIOPH'ORUM. Cor. o. Cal. chaffy scales, im-
bricated. Seed wool-bearing.
69. NAR'DUS. Cor. 2-valved. Cal. o. Seed covered.
(VI. *Juncus conglomeratus*, & *effusus*. XXI. *Carex*.
Typha. *Sparganium*. XXII. *Salix triandra*.)

DIGYNIA.

(GRASSES.)

1. *Flowers scattered, one in each calyx.*

74. PHAL'ARIS. Cal. 2-valved, valves keeled, equal,
including the corol.
76. PAN'ICUM. Cal. 3-valved, the third dorsal least.
(Cal. 2-valved, 2-flowered, 1 floret male, and
1 hermaphrodite. WITH.)

77. PHLE'UM. *Cal.* 2-valved, truncated, mucronate, sessile.
78. ALOPECU'RUS. *Cal.* 2-valved. *Cor.* 1-valved, the end simple. (Nectary 0. WITH.)
90. STI'PA. *Cal.* 2-valved. *Cor.* awn terminating, not jointed. (Awn very long, jointed at its base. WITH.)
92. LAGU'RUS. *Cal.* 2-valved, villous. *Cor.* awns 2 terminating, and 1 dorsal.
- CAL AMAGROS'TIS. *Cal.* 2-valved, nearly equal. *Cor.* hairy at the base. GMELIN.
79. MIL'IUM. *Cal.* 2-valved, valves ventricose, nearly equal, larger than the corol.
80. AGROS'TIS. *Cal.* 2-valved, valves acute, shorter than the *cor.* (In all the English species longer. WITH.)
86. DAC'TYLIS. *Cal.* 2-valved, one valve larger, longer, compressed, keeled. (Valves concave keeled. WITH.)

(*Scirpus palustris et fluitans. Schænus compressus.*)

2. Flowers scattered, 2 in each calyx.

81. AI'RA. *Cal.* 2-valved. Florets without the rudiment of a third.
82. MEL'ICA. *Cal.* 2-valved, with the rudiment of a third. (Nectary 1-leaved, fleshy. WITH.)
- SESLE'RIA. *Invol.* 2-leaved. *Cal.* 2-valved, with 1—3 florets. *Cor.* toothed at the end. WITH.

(*Avena elatior, flavescens, et fatua. Cynosurus. Dactylis glomerata. XXIII. Holcus.*)

3. Flowers scattered, many in each calyx.

84. BRI'ZA. *Cal.* 2-valved. *Cor.* cordate, valves ventricose.
83. PO'A. *Cal.* 2-valved. *Cor.* ovate, valves rather acute.
88. FESTU'CA. *Cal.* 2-valved. *Cor.* oblong, valves mucronate.
89. BRO'MUS. *Cal.* 2-valved. *Cor.* oblong, valves (outer valve) awned beneath the point.
90. AVE'NA. *Cal.* 2-valved. *Cor.* oblong, valves with a twisted (jointed) awn upon the back.
93. ARUN'DO. *Cal.* 2-valved. *Cor.* awnless, woolly at the base.

(*Dactylis glomerata. Aira cærulea et aquatica.*)

Galericiana officinalis - Roots warm, bitterish, sub acid.
 Strong scented anti-sparagmodic in doses of ʒi to ʒij, excellent in
 Labial Continence - Cats & especially rats are fond of them

TRIANDRIA. MONOGYNIA.

4. Flowers spiked, on a subulate receptacle.
95. *LOLIUM*. Invol. 1-leaved, 1-flowered. Fl. compound. (Inv. 1-leaved, containing 1 many flowered spikelet. WITH.)
96. *ELYMUS*. Invol. 4-leaved, 2-flow. Fl. comp.
98. *HORDEUM*. Invol. 6-leaved, 3-flow. Fl. simp.
99. *TRITICUM*. Cal. many flowered.
87. *CYNOSURUS*. Inv. 1-leaved, lateral. Fl. comp.
1360. *ROTTBOLIA*. Cal. ovato-lanceolate, flat, simple or 2-parted. Florets alternate on a flexuose rachis.

(*Poa minima*. XXI. *Carex*.)

TRIGYNIA.

(XXI. *Carex*. *Amaranthus*.)

100. *ERIOCAULON*. Cor. 3-petalled. Cal. compound. Seed 1, crowned with the corol.
101. *MON'TIA*. Cor. 1-petalled. Cal. 2-leaved. Caps. 3-valved, 3-seeded.
105. *POLYCARPON*. Cor. 5-petalled. Cal. 5-leaved. Caps. 3-valved.
104. *HOLOSTEUM*. Cor. 5-petalled. Cal. 5-leaved. Caps. opening at the top.

(IV. *Tillæa*. V. *Alsine media*.)

ENNEAGYNIA.

(XXII. *Empetrum*.)

MONOGYNIA.

Calyx limb at first revolute afterwards evolved into a feather-like pappus

44. *VALERIA'NA*. Cal. o. Cor. 1-petalled, gibbous at the base, superior. Seed 1. (or a 3-celled caps. WITH.)

Flowers red, with a sherry *ru'bra*. 1. *V.* Fl. monandrous, tailed; leaves lanceolate, very entire.

Root erect? dioica. 2. *V.* Fl. triandrous, dioicous; leaves pinnate, very entire. (Root-leaves ovate. HUDS.)

Stem striated 1st - Small Valer. Bogs, &c. P. 5-7. Curt. 278.

officinâ'lis. 3. *V.* Fl. triandrous; leaves all pinnate.

Great Wild Valer. Ditches, &c. P. 6. Curt.

Stem erect. simple 3 to 5 feet high, striated
Flowers terminal in large tufts reddish white.
Leaves opposite

Pseudacorus - (Roots acute, when fresh, warm when dry and may be substituted for Salongals; juice of the root per-
 gume in doses of 30 drops every 4 hours violent in operation
 and roasted resemble coffee. Having more heat by the same *Acrona* than
 TRIANDRIA. MONOGYNIA. Valeriana. 11
 Stem forked. Herbs 8 or 10 inches high.

4. V. Fl. triandrous; stem dichotomous; leaves locus'ta.
 linear, entire. *Flowers small, bluish white*
 Lambs Lettuce. Cornfields. A. 4-8. Ger. 310. 1. leaves minutely fringed
 Var. 2. Leaves acute. F. Dan. 738. *Young leaves eaten as salad*
 — 3. Leaves broad. F. B. III. 323. 2. *in spring*
 — 4. Upper leaves serrated. Curt. 319.
 — 5. Lower leaves laciniated. Lob. a. 319. 1.
 — 6. Taller. Leaves entire. Seeds round,
 swoln. H. ox. 7. 16. 37. See WITH.

55. CROCUS. Cor. 6-parted, equal. Stigmas con-
 volute. *Stigmata involuta*
 1. C. Stigma 3-parted, leaves narrower, margin *officina'lis*.? *Leaves purple*
 revolute. MART. C. autumnalis. E. Bot. *a white rib along the mid.*
 C. sativus a. LIN. HUDS. WITH. *fl. pale blue, streaked with*
 Common Saffron. Mead. &c. P. 8. 9. Mart. 58. *ver' nus. ? violet*
 2. C. Stigma trifid; leaves broader, margin patu-
 lous. MART. E. Bot. C. sativus b. LIN. *midrib of the leaves*
 HUDS. WITH. *white*
 Spring crocus. Meadows, &c. P. 3. Mart. 59. *fl. blue, white or violet*
 Obs. I have found this plant in flower near Blackburn
 late in the autumn.

59. IRIS. Cor. 6-petalled (6-parted), unequal, the
 alternate petals bent back as if jointed. Stig-
 mas petaliform, cowed; 2-lipped.
 1. Petals beardless, leaves ensiform.
 1. I. Alternate petals less than the stigma. *pseudac'orus*.
 Yellow Water Flag. Moist places. P. 7. Curt. 197. *Stem a 4, 9 high compressed*
 2. I. Leaves channelled, subulate, shorter than the *Xiph'ium*.
 2-flowered scape.
 Bulbous-rooted Flag. Near Fladbury, Worc. P. 7. *Flowers in pairs.*
 Ger. 101. 1.
 3. I. Scape with one angle. *Many 3 lipped* *fa'tida.* Flowers*
 Stinking Flag. Hedge banks. P. 6. 7. Ger. 60. *purplish ash colour*

56. IX'IA. Cor. 1-petalled, tubular, tube straight, fili-
 form, limbus 6-parted, campanulate, equal.
 Stigmas 3, simple.
 1. Scape shorter than the leaves.
 1. I. Scape 1-flowered, very short, stem-leaves *Bulboco'* *compresses*
 angular, stigmas six-fold. Syst. ed. 13. P. 76. *dium.*
 (Scape branched, flow. solitary, leaves fur- *fl. blue*
is foetida - Juice of the root - *Trachine* - *Root in infusion in*
decotion - *Murgaline* - *leaving a cocture of like character*

rowed, reflected. THUNB. Diss. de Ixia. See Syst. ed. 14. P. 83.)

Guernsey. — Miller pl. 240. See Symons.

65. SCHÆNUS. Glumes chaff-like, 1-valved, crowded. Cor. o. Seed 1, roundish, within the glumes.

1. Culm cylindrical.

min'imus. 1. S. Culm naked, head halved, invol. 3—5-leaved, one leaf subulate, much longer than the flowers. FORSTER. See Symons, p. 197.

— Guernsey — 5. 7.

Root creeping, knobly at bottom, leaves long, very long - sheath, most
maris'cus. 2. S. Leaves prickly on the back and margin. Long-rooted bast. Rushgr. Bogs. P. 7. 8, Ger. 29. 3.
nigricans. 3. S. Culm naked, spike an ovate head; invol. 2-leaved, one valve subulate, long. See Cyperus nigricans.

Head linear ferrugin'eus. 4. S. Culm naked, spike double, larger valve of the involucre as long as the spike. Ferruginous Bogrush. Bogs. P. 7. H. ox. 8. 12. 40.
Spikelets 2 or 3 - leaves short - sheath brown, apex notched - Culm slender & thick. 2. Culm 3-cornered.

Root short bearing, leaves not channelled, spike brown, shining
compress'sus. 5. S. Culm somewhat 3-cornered, spike 2-rowed; invol. 1-leaved. Leaves flat - rounded leaf sheath brown, shining
rufus. 6. S. Culm tending to 3-cornered, spike nearly ovate, spikelets 1-flowered, invol. 1-leaved. HUDS. Tawny Rushgrass. Marshes. P. 7. LIGHTF. 24. 2.
al'bus. 7. S. Culm leafy, tending to 3-cornered, flowers fasciculate, leaves setaceous. White-flow. Rushgr. Bogs. P. 7—9. F. Dan. 320.
fuscus. 8. S. Culm cylindrical, (3-cornered, but the angles obtuse) leafy, spikelets somewhat fasciculate, leaves filiform, channelled. (Spikes in pairs, plump. W.) S. albus. B. HUDS. Brown Rushgrass, Turfy bogs. P. 6. H. ox. 8. 11. 40.
Obs. It is placed in the first division by Lin.

66. CYPERUS. Glumes chaff-like, 2-rowed, imbricated. Cor. o. Seed 1, naked.

1. Culm cylindrical.

Culm erect, 14 inches - leaves rough lower bracted, ovate, sharp cartilaginous, shining ribbed, rib green ending in an awl-shaped seta
nigricans. 1. C. Culm naked, spike an ovate head, invol. 2-leaved, one valve subulate, long. Schoenus nigricans. Lin. Round blackhead. Rushgr. Bogs. P. 6. H. ox. 8. 10. 28.

2. C. Culm naked, setaceous, spike ovate, 2-valv- *acicularis*.
ed, seeds naked. *Scirpus acicularis*. LIN. Culm 4 angled leafy
Slender Clubrush. Bogs. P. 8. F. Dan. 287. Two firm on leaf's
Culm many sterile culms long, slender, leafy - Sheaths
2. Culm 3-cornered, leafy. very fine
3. C. Umbel leafy, more than decomposed, pe- lon'gus. ?
duncles naked, spikes alternate, linear involucre 3 or 4 leaved
Sweet Cyperus. — P. 8. Ger. 30. 1. the last 30. Root very long, brown
Culm 3 feet base leafy - Sheath short, red. Leaves. 6 inches high
67. SCIR'PUS. Glumes chaff-like, on all sides im-
bricated. Cor. o. Seed 1, beardless. (Seed one
3-cornered, often woolly; hairs shorter than
the spike. WITH.)

1. Spike single.

1. S. Culm cylindrical, naked; spike nearly o- palus'tris. il }
vate, terminating. — Glumes ovate, obtuse, black. multicaulis }
Clubrush. P. 8. Moist places. E. Bot. 131.
2. S. Culm striated, naked; spike 2-valved, ter- caspi'tus.
minating, as long as the invol. Roots separat- spike ovate 4 or 5
ed by a scale. — Howick, Culm densely tufted. Sheath 6 inches
Dwarf Clubrush. Bogs. P. 6. F. Dan. 167. Sheath ending in a short
leaf.
3. S. Culm scored, naked; spike terminating, few-pauciflorus.
flowered, longer than the valves of the in- spike ovate 6 or 7 fl'd
volucre. LIGHTF. HALLER. Culm many 6 inches barren culms
Obs. The stems more rigid, not so close together, and tallest, glumes often
bearing fewer florets than the caspi'tus. WOODW.

Chocolate-headed Clubrush. Highl. Mount. P. 8.

Ger. 21. 3.

- S. See *Cyperus acicularis*. *acicularis*.
4. S. Culms cylindrical, naked, alternate, stem flu'itans.
leafy, flaccid. Culm branched barren culms flaccid, trailing
Floating Club-rush. Ditches. P. 8. E. Bot. 216. at the joints, very
long and floating.
2. Spikes many, culm cylindrical.

5. S. Culm cylindrical, naked; spikes many, ovate, lacus'tris.
terminating, peduncled. (Cal. ciliate, 3-cleft, Coverdous, middle segm. subulate. STOKES.) 6 feet dark green - Sheath's sil-
Var. 1. Invol. somewhat membranous, short- rate, brownish
er than the panicle; spikes rather long. a. hortic. 2. la. 180.
HUDS. Ger. 35. 3. 1800 300 1800 1800 1800 1800 1800 1800 1800 1800
— 2. Invol. nearly the length of the pan.;
spikes ovate. β. HUDS. Gerard. 31. 4.
— 3. One side of the culm flattish. γ. HUDS.
H. ox. 8. 10. 2. 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800
Bull-rush. Pools, &c. P. 7. 8.

- Root horizontal in tufts*
Culms scapex 3 feet
Holoscha'- 6. S. Culm cylindrical, naked; spikes almost globular, crowded, peduncled; invol. 2-leaved, unequal, mucronate.
Round-head. Clubgr. Sea coast. P. 7. Park. 1194. 4.
- Single-h. Clubg. Moist mead. P. 7. Jacq. Austr. 448.*
roma'nus. 7. S. Culm cylindrical, naked; head lateral, compact, bracte reflected.
Least Rush. Wet ground. A. 7. 8. F. Dan. 311.
- Culm bottle-like*
Slender unbranched
seta'ceus. 8. S. Culm naked, setaceous, (lateral spikes sessile, or peduncled) terminating spike sessile.
3. Culm 3-cornered; panicle naked.
- Root Pointed Clubbrush. Sea shore. P. 7. 8. Pluk. 40. 2.*
tri'queter. 9. S. Culm 3-cornered, naked; spikes lateral, ovate, peduncled, or nearly sessile, point of the culm erect. S. mucronatus. B. Huds.
4. Culm 3-cornered; panicle leafy.
- Root Pointed Clubbrush. Sea shore. P. 7. 8. Pluk. 40. 2.*
marit'imus. 10. S. Culm 3-cornered, panicle close, leafy, scales of the spikelets 3-cleft, middle segment subulate. Leaves channelled. Sheaths smooth.
Salt-marsh Clubgr. Sea coast. P. 8. Curt. 284.
- Culm 3 feet*
sylvat'icus. 11. S. Culm 3-cornered, leafy; umbel leafy; peduncles naked, more than decomposed; spikes crowded. (Scales entire STOKES.)
Wood Clubgrass. Wet places. P. 8. Ger. 30. 5.
- Leaves broad acute, hairy - Sheaths smooth*
68. ERIOPH'ORUM. Glumes chaff-like, on all sides imbricated. Cor. o. Seed 1. surrounded with very long wool.
- Root*
vagina'tum. 1. E. Culms sheathed, cylindrical; spike scariose.
Single-headed Cotton-gr. Bogs. P. 2-4. Curt. 219.
- Root*
polysta'chion. 2. E. Culms cylindrical, leaves flat; spikes peduncled & drooping - Culm 2 inches high.
Bogs. P. 5. 6. Leers 1. 5.
- Root*
angustifo'- 3. E. Culms cylindrical, leaves 3-cornered, channelled, spikes peduncled. E. polystachion.
Huds.
- Root*
alpi'num. 4. E. Culms naked, 3-cornered, spike (solitary) shorter than the pappus.
Alpine Cotton-gr. Bog near Forfar. P. 6. E. Bot. 311.
- Root*
69. NAR'DUS. Cal. o. Cor. 2-valved. (Nect. o.)
- Root*
stric'ta. 1. N. Spike setaceous, straight, 1-rowed.
Small Matweed, Heaths, &c. P. 6-8. E. Bot. 290.

DIGYNIA.

74. PHALARIS. Cal. 2-valved, valves keeled, equal, including the corol.

1. P. Panicle nearly ovate, spike-like, glumes keel- ed, hairy. (Nect. 2.; cal. double. WITH.) *canarien'sis*. smooth

Manured Canary-gr. Road sides. A. 6—9. Ger. 86. *edges white*

2. P. Panicle oblong, ventricose, large. See *Cala-arundinal-*

3. P. Pan. cylindrical, spike-like, smooth, vivipar- *phleoi'des*. *prosp*

ous. (Glumes lineari-lanceolate, smoothish, *culm single* *the inner margin abrupt*. E. BOT.) *shining 10 inches* - *leaves*

Cat's-tail Canary. Swaffham Heath, &c. P. 6. 7. *sheaths rather rough* -
E. Bot. 222.

4. P. Spike ovate (ovato-lanceolate), ciliate, culm *arena'ria*.

branched. HUDS. WITH. *Phleum arenarium* *culm many* *leaves*

Lin. *below naked above 9 inches* *purple* *shining* -

Sea Timothy-gr. Sandy sh. A. 7. 8. E. Bot. 222. *leaves glaucous*

76. PAN'ICUM. Cal. 3-valved, the third valve least. (Cal. 2-valved, 2-flowered; 1 flor. herm. the other male, or neutral. WITH.)

1. P. Spike verticillate (cylindrical, rough when *verticilla'*-
stroked downwards. WITH.); involucrets 1- *tum*.

flowered, 2-bristled. *sheaths in whorls by fours* *culm scarcely*

Kneed-grass. Cornfields. A. 6. 7. Curt. *seeds* *blackly above*

2. P. Spike cylindrical, involucrets 2-flowered, *viride*.

fasciculato-hairy, seeds nerved. (Spike cy- *culm ascending*

lindrical, soft to the touch, involucrets 3-bris- *leaves many* *redd*

tled, 1-flowered. WITH.) *anicle cylindrical* *whitish purple*

Green Panick. Sandy fields. A. 7. Curt.

3. P. Spikes alternate and in pairs, spikelets sub- *Crusgalli*.

divided, glumes awned, hispid; rachis 5-cor- *spikelets facing*

nered. *one way* *scabrous*

Var. 1. Awns (o. CURT.) not twice as long as *5 angled smoothish*
the calyx. *leaves soft broad*

Loose Panick. Wet cornfields. A. 8. Curt.

Var. 2. Awns ten times as long as the calyx. *7 or 9 ribbed*

Ger. 16, 1.

4. P. Spikes digitate, spreading, knotty on the in- *sanguinal'e*.

side of the base, flow. in pairs, awnless, sheath *leaf*

of the leaves dotted. *culm ascending 9 inches*

Cock's-foot Pan. Cornfields. A. 7. 8. Curtis.

5. P. Spikes digitate, spreading, villous on the in- *dacty on*.

side of the base, flow. solitary, runners creep- *culm 9 inches*

ing. *leaves short glaucous slightly* *ribbed* *sheaths hispid*

Creeping Panick. Sea shore. P. 8. With. P. 21. *spike filiform*
purplish

77. PHLE'UM. Cal. 2-valved, sessile, linear, truncated, ending in two points. Cor. inclosed.

praten'se. 1. P. Spike cylindrical, very long, ciliate, culm (mostly) erect. (Cal. ciliate and awned. WITH.)

Var. 1. larger. Culm erect.

Com. Timothy-gr. Pastures. P. 7. 8. Schr. 14. 12.

Var. 2. smaller. Culm ascending. Schr. 14. 3. 4.

arenarium. 2. P. Spike ovate, ciliate, culm branched. See *Phalaris arenaria*.

nodosum. 3. P. Spikes cylindrical, culm ascending, leaves oblique, root bulbous.

Mountain Timothy-gr. On walls. 6. Barr. 22. 1.

paniculatum. 4. P. Pan. cylindrical, spike-like, glumes naked, culm somewhat branched. HUDS. WITH.

Branched Timothy-gr. Meadows. P. 8. Barr. 28. 2.

alpinum. 5. P. Spike ovato-cylindrical (purplish).

Mount. Timothy-gr. Mountains. P. — F. Dan. 213.

78. ALOPECU'RUS. Cal. 2-valved. Cor. 1-valved. (Nect. o.)

pratensis. 1. A. Spiked, culm erect, cal. hairy, cor. awned.

WITH. LIN. *Seeds 6. and 10.*

Meadow Foxtail. Very common. P. 5. 6. Curt. 296.

agrestis. 2. A. Culm spiked erect, glumes smooth (calyx glumes united at the base. WITH.)

Field Foxtail. Road sides. P. 5. 6. Curt. Mart. 6.

geniculatus. 3. A. Culm spiked geniculate.

Obs. Lin. has described *A. pratensis* and *geniculatus* as awnless, but we always find awns in both species.

Var. 1. Awns longer than the calyx, roots fibrous.

— In meadows. P. 6. Curt. 339.

— 2. Awns scarcely twice as long as the calyx, root bulbous, pedicels branched. On bogs. 5.

— 3. Awns more than twice as long as the calyx, root bulbous, pedicels not branched.

— Meadows. 6.

— 4. Awns very soft, not longer than the calyx, pedicels branched, root fibrous.

— In marshy places. P. 8—10. Ger. 14. 2.

bulbosus. 4. A. Culm erect, spike cylindrical, root bulbous.

Bulbous Foxtail, Salt marshes. P. 6. 7. Bar. 699. 1.

monspeliensis. 5. A. Pan. somewhat spiked, cal. rough, cor. awned (2-valved).

Bearded Foxtail. Wet past. A. 6. 7. Park 1166. 3.

TRIANDRIA. DIGYNIA. Alopecurus.

17

6. A. Pan. somewhat spiked, cal. villous, cor. panice'us.
awned (2-valved).

— In dry soil. A. 7. Schr. 20. 3.

90. STI'PA. Cal. 2-valved, 1-flowered. Cor. outer
valve with a terminating awn jointed at the
base.

1. S. Awns woolly. *Roots in tufts, culms not branched* Penna'ta. Leaves *moderate*
Downy Feather-gr. On mount. P. 7. 8. Barr. 46. *Grass-like spikelets*

92. LAQU'RUS. Cal. 2-valved, awn villous. Cor. *4 or 5 very large*
outer petal with two terminating awns, and *each up to 10 inches*
one dorsal, twisted awn. *quite as large*

1. L. Spike ovate, awned. *ovatus.*

— In Guernsey. DICKS. A. Schreb. 19. 3.

— CALAMAGROS'TIS. Cal. glume 2-valved, 1-flow-
ered. Cor. hairy at the base. GMEL. WITH.

1. Awned.

1. C. Pan. lanceolate, contracted, spike-like, cor. lanceola'ta.
linear, hairy at the base, awn dorsal straight,
short, culm branched. WITH. See Arundo
Calamagrostis.

2. C. Pan. stiff and straight, cor. small, hairy at *Epige'jos.*
the base, leaves flat. WITH. See Arundo *Spikelets intricate*
Epigejos. bundles of awns are away from lanceolate, root
jointed, creeping culms in 1. 2. 3. 4. 5 feet high - Panicle re-

3. C. Pan. spike-like, cor. hairy at the base, leaves *arenaria.*
with the edges involute, pointed, thorn-like at
the end. WITH. See Arundo *arenaria.*

4. C. Pan. large, loose, linear-lanceolate; leaves *variegata.*
broad, flat, culm simple. WITH. Phalaris
arundinacea. Lin.

— Banks of rivers. P. 7. H. ox. viii. 6. 41.

Var. 2. Leaves glaucous green. RAY SYN.
400. 1.

— 3. Leaves striped. C. colorata. Aiton.

79. MIL'IUM. Cal. 2-valved, 1-flowered, valves
nearly equal. Cor. very short. Stigma pen-
cil-like.

1. M. Pan. somewhat spiked, flow. awned. Alo-lendig'erum.
pec. ventricosus. Huds.

Panick Millet. Pastures, &c. A. 8. 9. Schr. 23. 3.

2. M. Flow. panicked, scattered, awnless. *effusum.*

Soft Millet. Moist woods. A. 5. 6. Curt. 248. *Panicum semivittatum*

in 3 feet, leaves long, dark green, drooping - Herb slender
white drying -

80. *Agrostis*. Cal. 2-valved, 1-flowered; rather less than the corol. Stigm. longitudinally hispid. (Cal. 1-flowered, 2-valved, lanceolate, acute, generally rough on the keel, longer than the corol. Cor. 2-valved. Stigm. hairy. WITH.)

1. Awned.

- Panicle spreading, rather one-sided, culm 3 feet 1/2, spikelets green or yellow -* *Spi'ca-ven'ti*. 1. A. Outer petal with a stiff straight very long awn, pan. patulous. (Cal. glumes nearly equal, cor. valves equal, awn twice as long as the cor. fixed just beneath its point. WITH.)
Silky Bent. Sandy fields. A. 6-8. F. Dan. 853.
- Panicle spreading, many-leaved - culm creeping, taking root - leaves rough -* *palus'tris*. 2. A. Cal. glumes equal; cor. outer valve twice the length and breadth of the inner; awn shorter than the corol, fixed just beneath its point. WITH.
 — In moist ditches. P. 6. 7.
- Culm 10 inches, stem leaves rough, panicle 3 inches, culm* *cani'na*. 3. A. Cal. valves nearly equal, cor. valves very unequal, awn jointed, twice the length of the cor., fixed just below its middle. WITH. not LIN. Huds.
 — A. 6. Leers. 4. 2. F. Dan. 161.
- Back of the outer glumette serrate - spikelets pale green* *vine'al'is*. 4. A. Cal. coloured, awn from the back of the cor. almost as long as the calyx, culms ascending. SCHR. WITH.
 — On heaths, &c. 7-9. Scheuch. 3. 9. D. E.
- Back of the outer glumette serrate - spikelets pale green* *pall'ida*. 5. A. Cal. valves unequal; cor. inner valve capillary, very short, awn somewhat longer than the cor. fixed below its middle. WITH.
 — New Forest, Hants. — 5. 6. With. pl. 22.
- Culm 1 foot, leaves pale rather glaucous* *alpi'na*. 6. A. Leaves setaceous, panicle compact; cal. rough, coloured; cor. (hairy at the base, STOKES.) outer valve with a jointed dorsal awn. GMEL. WITH.
 A. *canina*. β. Huds.
 — New Forest, Hants. P. 5. 6. Scheuch. pr. 4. 1.
- Culm decumbent, root creeping, spikelets white, purple at tip* *littoral'is*. 7. A. Panicle somewhat spike-like, cal. glumes awned. WITH.
 — Norfolk coast. P. 6. With. pl. 23.
- seta'cea*. 8. A. Leaves setaceous (glaucous), culm erect. CURT. A. *canina*. γ. Huds.
 Sheep's Fescue-leav. Ag. Piddletown heath. P. 7. Curt.

2. Awnless.

- Culm creeping, branches rooting - leaves flat rough, sheath smooth - root creeping, thick, white* *alba*. 9. A. Panicle large, spreading; cal. both valves serrulated; culm procumbent. WITH.
 Var. 1. Pan. branches crowded with flor. at the base. — Bogs, &c. P. 6. 7. Leers. 4. 5.

Var. 2. Only the shorter pan. branches crowded with flor. at the base, both cal. valves serrulated.

Light sandy loam. P. 7. 9.

3. Only the shorter pan. branches crowded with flor. at the base; longer branches subdivided; cal. inner valve only serrulated upwards.

Amongst wheat in a loamy soil. P. 7. 9.

4. Pan. branches bare at the base, subdivided upwards. P. 7—9. See WITH.

10. A. Pan. scattered, branches bare at the base, ni'gra.

flor. few, cal. inner valve smooth; roots creeping. WITH. *Stolonifera. creeping*

Bl. Squitch-gr. In marl. soil. P. 8—10. Leers. 4. 6. *Panicle 3 to 4 inches*

11. A. Panicle compact; branches stiff, short, stolonifera.

densely crowded with florets at the base; cal. inner valve smooth, outer only serrulated upwards. WITH. LIN. *Stolonifera. creeping, rooting*

Bl. Squitch-gr. Moist mead. P. 7—9. Ger. 26. 1.

12. A. Pan. large, patulous; longer branches naked, shorter crowded with flor. at the base, maritima.

cal. inner valve smooth, outer serrulated upwards. WITH.

In sand on the south coast. P. 6. 7. Ger. 23. 1.

13. A. Pan. spreading, branches bare at the base, vulgaris.

flor. numerous; cal. inner valve smooth, outer serrulated upwards; cor. inner valve but half the size of the other, deciduous. WITH. *Paniculata. like*

A. polymorpha. a. Huds.

On poor land. P. 5—7. Gr. pasc. F. Dan. 163.

Var. 2. dwarf. A. pumila Lightf. Lin. ? A.

polymorpha. y. Huds.

Barren soil. P. 7. Lightf. II. front.

3. sylvatica. Cor. after flowering twice as large as the calyx. A. sylvatica. Lin.

A. polymorpha. n. Huds. Hornsey wood P. 6—8.

14. A. Panicle filiform.

In Wales. A. 7. H. ox. 8. 2. row 3. 10.

Obs. The florets have the habit of a Poa, but there is only one in each calyx, and the cal. are strictly seated upon a rachis. See WITH.

86. DACTYLIS. Cal. 2-valved, compressed, one valve larger, keeled. (Cal. 2-valved, many-flowered, valves broader on one side. Cor. 2-valved, inclosing the seed. Nect. 2. WITH.)

1. D. Spikes terminating, sometimes in pairs, stric'ta.

min'ima.

Spikes elliptical

large and truncated

at top. Calyx 2-fid

scaly and leavy at foot.

above

flor. (leaning one way, downy) not expanding, culm and leaves stiff and straight. AITON.

WITH.

Smooth Cocksfoot. Marshes. P. 8. 9. E. Bot. 380.

glomerata. 2. D. Pan. 1-rowed, crowded (cal. 4-flowered).

Rough Cocksfoot. Common. P. 6—8. E. Bot. 335.

81. AITON. Cal. 2-valved, 2-flowered, without any rudiment of a flor. interposed.

1. Awnless.

aquatica. 1. A. Pan. spreading, flor. awnless, smooth, longer than the calyx leaves flat. *Spikes 1 rowed*

Water Hair-grass. Margins of Pools. P. 6. 7. Curt.

2. Awned.

capitata. 2. A. Leaves flat, pan. spreading, pet. villous and awned at the base, awn straight, short.

Turfy Hair-gr. Moist woods, P. 6—8. Ger. 5. 1. 2.

Var. 2. Pan. viviparous. Lightf. Highlands.

flexuosa. 3. A. Leaves setaceous, culms almost naked, pan. diverging, pedunc. flexuose, *and in leaves*

Heath Hair-grass. Heaths, &c. P. 6—8. Schr. 20.

montana? 4. A. Leaves setaceous, panicle contracted, flor. hairy at the base, awned, awn twisted, longer.

High heaths, &c. P. 7. 8. Scheuch prodr. 4. 4.

Obs. The A. montana found in this island is supposed by With. to be only a young plant of A. flexuosa.

Var. 2. setacea. Awns twice as long as the flor. Huds.

canadensis. 5. A. Leaves setaceous, the highest one spathaceous, (sheaths rough) including the lower part of the pan. (Pan. after flowering passing further out of the sheath.) *Spikes 1 rowed*

Grey Hair-gr. Sandy shores. P. 7. 8. With. pl. 24.

praecox. 5. A. Leaves setaceous, sheaths (smooth) angular, pan. spiked, flor. awned at the base (awn taller than the calyx).

Early Hair-grass. Dry commons. P. 5. Curt. 146.

6. A. Leaves setaceous, pan. diverging (when ripe); flow. awned, distant.

Silver Hair-grass. Sandy pastures. A. 7. Curt.

82. MELICA. Cal. 2-valved, 2-flowered, with the rudiment of a third interposed. (Nect.

1-leaved. Stam. dilated at the base. WITH.)

TRIANDRIA. DIGYNIA. Melica.

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1. M. Petals beardless, pan. nodding, simple. M. nutans. ^{scarcely branched} Culm erect montana. Huds. ^{Panicle 1-sided - leaves erect short - glumes} Mount. Melic. Mount. woods. P. 6. 7. Mart. 65. ^{leaves erect short - glumes}
2. M. Pan. compact, flow. cylindrical. (Culm knot- *carulea*. Culm erect less. WITH.) ^{glumes all white - spikelets green & purple} Purple. Melic. Boggy past. P. 5. 7. Curt. 301. ^{at ribb, spikelets white}
3. M. Pan. thinly set, cal. with two flor., one uniflora. herm., the other neutral. M. nutans. Huds. ^{Panicle one-sided} Wood Melic. Hedges, &c. P. 5-7. Curt. 301. ^{Culm 12 in. filiform leaves flat light green - sheath short - glumes purple}
- SESLERIA. Invol. 2-leaved. Cal. 2-valved, 1-3-flowered. Cor. toothed at the end. WITH.
4. S. Culm simple, spike ovato-oblong. Cynosurus *carulea*. Linn. ^{leaves flat - of the involucrem alternate} Blue Moor-gr. M. past. P. 4-6. Park. 1152. 6. ^{Culm 12 inches sheath short, pale smooth - spikelets blue and brown, shining}
83. Po'A. Cal. 2-valved, many-flowered. Spikel. ovate, valves scariose at the margin, rather acute.
1. Panicle spreading.
1. P. Spikel. linear, six-flowered (5-10-flowered, *aquat'ica*. Culm thick culm 6 feet high). ^{glumes all white - spikelets green & purple} Reed Mead.-gr. Banks of rivers. P. 7. 8. Curt. 330.
2. P. Pan. with subdivided branches, spikel. 5- ^{dis'tans. Culms many} flowered, flor. distant, obtuse (cal. valves very unequal). A. *aquat'ica*. B. Huds. ^{10 inches leafy & smooth - flowers green or green & purple}
- Loose-flowered M. Sandy places. P. 6. 7. With. 25.
3. P. Spikel. 5-flowered, smooth, culm cylindrical- ^{praten'sis.} cal, erect. (Sheath scale short, obtuse. CURT.) ^{leaves all flat} Smooth-stalked M. Dry banks, &c. P. 5. 6. Curt. ^{smooth - spikelets}
- Var. 2. *setacea*. Leaves slender, culm smooth. ^{numerous green and white} Woods, &c. P. 6. H. ox. viii. 5. 19.
4. P. Pan. very much branched, spikel. 6-flower- ^{alpi'na.} ed, cordate. (Flor. 2-5 in each spikel.) ^{Culm 12 inches erect} On Snowdon. P. 6. 7. Scheich. pr. 3. 4. ^{var 3-branched, purple}
- Var. 2. *viviparous*. Pan. viviparous. P. D. 807. ^{radical leaves flat}
5. P. Spikel. 4-flowered, pubescent, culm erect, ^{angustifo-} cylindrical. (Root-leaves doubled together, ^{lia. ? Culm erect} very slender, sheaths smooth, sheath scale ^{10 inches} short, truncated. GMELIN.) ^{stem leaves short broad, light green} H. ox. 5. 19. Leers. 6. 3. ^{spikelets green or green & white}
- Obs. Mr. Afzelius considers all the supposed British specimens of this plant as var. only of P. *praten'sis*. See With.
1. P. Spikelets ovate, flor. smoothish, acute; ^{bulbo'sa.} Culm 12 in. ^{radical leaves slender convolute, uppermost short}

- culm erect, bulbous at the base. Huds. With.
 not LIN.
 Bulbous Meadow-gr. Meadows. P. 5. 6. Vaill. 17. 8.
 Var. 2. viviparous. Pan. viviparous. Ger. 3. 1.
- an'nua. 7. P. Pan. spreading at right angles, spikelets ob-
 tuse, culm oblique compressed. (Branches in
 pairs, spikelets mostly 4-flowered, leaves flat,
 sheaths smooth. WITH.)
 Suffolk-grass. Borders of fields. A. 4. 9. Curt. 1. 2.
- trivia'lis. 8. P. Spikelets 3-flowered, pubescent at the base,
 culm erect, cylindrical (rough; sheath scale
 acuminate. Curt.).
 Bird-grass. Sides of ditches, &c. P. 6. 7. Curt.
 Var. 2. reptans. Stems procumbent, taking root
 at the joints, spikelets 2 or 3-flowered.
 Orcheston-grass. In Maddington. Mr. SWAYNE.
2. Panicle slender, compact.
- crista'ta. 9. P. Pan. spiked; cal. somewhat hairy, about 4-flow-
 ered (flor. 2 or 3, rarely 4) longer than the pe-
 duncle, petals awned. *Aira cristata*. Lin. Sp.
 Crested Mead.-gr. High bar. past. 7. H. ox. viii. 4. 7.
- memorabilis. 10. P. Pan. slender (open when flowering), spikelets
 mostly 2-flowered, mucronate, rough; culm in-
 curved (feeble). *P. angustifolia*. B. Huds.
 Wood Meadow-grass. Woods. A. 6. F. Dan. 749.
- min'ima. 11. P. Cal. 1-flowered. *Agrostis minima*. Lin.
 Obs. It is truly a Poa. STOKES. See Page 19.
3. Panicle pointing one way.
- may rig'ida. 12. P. Pan. lanceolate, somewhat branched, 1-rowed,
 branchlets alternate, 1-rowed (peduncle border-
 ed on one side).
 Hard Meadow-grass. Sandy pl. A. 6—8. Curt. 142.
- procum'- 13. P. Culms inflexo-procumbent, pan. 1-rowed, rig-
 id; spikelet nearly linear, about 5-flowered;
 flor. obtuse, hairy at the base. Curt. *P. rupestris*.
 Procumbent Meadow-gr. St. Vinc. Rock. P. 8. Curt.
- marit'ima. 14. P. Panicle compact, 1-rowed, branched, branches
 in pairs, spikelets oblong; florets obtuse, leaves
 acute, involute; culm oblique cylindrical. Huds.
 Sea Meadow-grass. Sea coast. P. 6—8. F. Dan. 251.
- compres'sa. 15. Pan. compact, 1-rowed (erect before and after
 flowering) culm oblique compressed.
 Creeping Meadow-grass. Walls. P. 6. E. Bot. 365

16. P. Pan. conglomerate, outer pet. hairy at the margin, culm decumbent: WITH. Fest. decumbens. Lin. Sp.
— Moist pastures, P. 8. F. Dan. 162.
17. P. Pan. spreading, spikelets mostly 3-flowered, glau'ca. flor. acuminate, woolly at the base, leaves subulate. WITH. P. pratensis. B. Huds. *culm 2 feet leaves flat slender*
— Mountains. P. 6. 7. F. Dan. 964. *spikelets ovate violet*
84. BRIZA. Cal. 2-valved, many-flowered. Spikelets 2-rowed, valves cordate, obtuse, the inner minute.
1. B. Spikel. triangular, cal. longer than the flor. mi'ndr. *culm 9 in*
(inner valve of the cor. cloven at the end). *leaves erect acute flat*
Small Quake-grass. A. P. 2. 7. Park. 1165. 5. *light green spikelets green & white*
2. B. Spikel. ovate, cal. shorter than the flor. (inner valve of the cor. ciliate, entire at the end. WITH.) *culm 1 foot erect*
leaves erect acute flat, sheaths very long thickened at the mouth
3. B. Spikel. (5 to 7) cordate, flor. 17 (a raceme maxima? rather than a panicle). *culm 2 feet leaves short & narrow*
Great Quake-grass. A. 7. Ger. 87. 3. *spikelets nearly 1 inch long*
88. FESTUCA. Cal. 2-valved. Spikelet oblong, somewhat cylindrical, glumes acuminate. (Awn terminating, inner glume of the cor. smooth or finely downy. SMITH.)
1. Panicle directed to one side, awns longer than the cor.
1. F. Spikelets erect, smooth, cal. one valve entire, the other acuminate (leaves broader than those of F. Ovina.). *bromoides. Panicle short spike shape few flowers*
Barren Fescue. Walls. A. 5. 6. Scheuch. 6. 10. *culm 3 inches leaves bristly*
2. F. Panicle spiked (drooping), cal. (smaller valve) very minute, awnless; florets rough, awns long. *myurus. Panicle long*
Wall Fescue. Walls. A. 5. 6. Leers. 3. 5. *culm 12 inches leaves 3 to 6*
3. F. Pan. compact awned, culm 4-cornered, almost naked, leaves setaceous. *ovina. spikelets 4 to 6 5 flower bristled*
Sheep's Fescue. P. 6. 7. Martin 102. *rad. leaves glaucous culm 2*
Obs. It is found awnless and also viviparous. See With.
4. F. Pan. rough, spikelets 6-flowered, awned, rubra. *spikelets oblong the last floret awnless, culm semi-cylindrical. leaves hairy*
Purple Fescue. High heaths. P. 6. Leers 8. 1. *sheep's fescue short 2 or 3*
5. F. Pan. oblong, spikelets oblong, smooth, leaves setaceous. (Flor. about 6; root fibrous.) *duriuscula. Panicle facing one way spreading*
Hard Fes. Dry pl. P. 6. Leers 8. 2. E. Bot. 470. *spikelets lanceolate bristled - leaves stiff bristly like grasses*
rad. leaves laid smoothish - sheaths smooth

- Panicle facing one way - leaves thread-like, sea-green stiff*
dimet'rum. 6. F. Panicle spike-like, pubescent, leaves filiform.
glanell'ent'ly pubes. Pubescent Fescue. Woods. P. 6. 7. F. Dan. 700.
- gla'bra.* 7. F. Panicle branched, erect, compact, spikelets subulate, 3-flowered, awned, smooth. LIGHTF.
 (Nearly allied to F. *cambrica*, if not the same.
 HUDS.)
 — At Ardbigland in Galloway. P. 7.
- cam'brica.* 8. F. Panicle oblong, erect, branched, spikelets awned, smooth, leaves flattish, naked. HUDS.
leaves glaucous
stem - leaves smooth Welsh Fes. Highest hills about Llanberis. P. 7. 8.
culm 9 inches - lowest 6 or 7 fls.
- renuifolia.* 9. F. Leaves setaceous, rather long, erect: culm naked; spikelets rough. WITH. *leaves hair-like*
way - spikelets 4 or 5 fls. Dry pastures. P. 7. 8. Leers 8. 4.
- ela'tior.* 10. F. Panicle erect; spikelets somewhat awned, the exterior ones cylindrical.
Culm 4 feet - leaves broad, ribbed
flowerlets cylind. Var. 1. Bog. F. Pan. decompound, at first drooping, nearly erect when in flower, spikelets ovato-lanceolate, acute, awnless, leaves flat. CURT.
 F. *elator*. β. Lin. Sp. Boggy meadows. P. 6. 7. Curt.
 Var. 2. Meadow F. Panicle oblique, pointing one way, spikelets awnless, nearly linear, leaves flat. F. *pratensis*. CURT. F. *elator* α. Lin. Sp.
- flu'tians.* 11. F. Panicle branched, erect, spikelets nearly sessile, cylindrical, awnless, *compressed*
culm 2 feet - leaves pointed
sheaths streaked, smooth Flote Fesc. Wet ditches. P. 6—9. Curt. Leers 8. 5.
panicles many flowered, outer glumes 3 ribbed
 3. Flowers in spikes.
- lotia'cea.* 12. F. Spiked, spikelets alternate, sessile, compressed, awnless. HUDS. *spikelets linear 2 rowed*
culm 2 feet - leaves flat
root fibrous Spiked Fescue-grass. P. 6. 7. Curtis.
- decum'bens.* 13. F. Panicle erect, spikelets nearly ovate, awnless; calyx larger than the florets, culm decumbent.
root fibrous, creeping
culm 9 inches, smooth (Calyxes 3-flowered, allied to Melica) See Poa decumbens. *spikelets 2 rowed, green, grey & purple*
- pinna'ta.* 14. F. Spikel. sessile, culm simple, awns shorter than the corol. POLlich. WITH. Br. *pinnatus*.
spikelets dilated below Lin. See Bromus *pinnatus*. *culm 2 feet - pointed & yellow*
leaves & sheaths naked Spiked Fescue. In chalky soils. P. 7. Barr. 25.
- sylva'tica.* 15. F. Spikel. sessile, culm simple, awns as long as the corol. WITH. See Bromus *sylvaticus*.
panicle facing one way
culm 3 feet - smooth, joints simple - sheaths narrow - white & green beneath
89. Bro'mus. Cal. 2-valved. Spikel. oblong, cylindrical, 2-rowed; awn beneath the point.
 (Inner glume ciliate with strong distant bristly hairs. SMITH. Lin. Tr. V. 4. 28. 1.
- secal'nis.* 1. B. Panicle spreading, pedunc. mostly simple,
leaves rather hairy on their upper surface, long broad, ears & bottom blighted. sheaths angular - panicle 12 inches long

spikel. ovate, compressed, 10-flowered, flor. distinct, nearly cylindrical. SMITH. LIN. B. polymorphus. 7. Huds. var. 2. With.

Smooth Rye Brome-gr. A. 6. 7. Scheuch. agr. 5. 10.

2. B. Panicle spreading, pedunc. nearly simple, multiflo'.

spikel. ovato-lanceolate, compressed, 15-flowered, flor. somewhat imbricated, rather cylindrical. SMITH. GMEL. *rus. Panicle 9 inches long. Peduncles scarcely branched very unequal -*

Downy Rye Brome-gr. Cornfields. 7. Scheuch. 5. 9.

3. B. Pan. erect, dense, pedunc. branched, spikel. mol'tis.

ovate, flor. imbricated, depressed, nerved, pubescent. SMITH. LIN. B. polymorphus. *leaves soft pubescent acute, dark green - Culm 2 feet - Sheaths hard*

a. Huds. var. 1. With. Soft Brome-grass. — 5. 6. Curt. fasc. 1. 8.

Var. 2. nanus. On walls. Weigel 1. 9.

4. B. Pan. rather erect, diffuse, pedunc. simple, spikel. ovate, 6-flowered, florets imbricated, depressed, nerved, smooth. SMITH. LIN. B. polymorphus β. & δ. Huds. var. 3 & 4. With. *racemo'sus. Culm slender, leaves a little pubescent Peduncles, not branched Panicle not branched*

Smooth Brome-gr. Meadows. 6. H. ox. viii. 7. 19. *leaves soft, white & green - Panicle not branched*

5. B. Pan. nodding, pedunc. simple, spikel. ovate, 12-flowered, flor. imbricated, depressed, awns diverging. SMITH. LIN. HUDS. WITH. *sus? Culm 15 inches leaves & sheaths pubescent*

Corn Brome-gr. Cornfields. A. 7. Scheuch. 5. 11. *spikelets large, branching -*

6. B. Pan. spreading, pedunc. branched, spikel. lanceolate, 8-flowered, flor. elliptical, imbricated, depressed, smoothish. SMITH. LIN. WITH. *arven'sis. Peduncles pithy, upright afterwards drooping, with Culm 3 feet upright 6 to 12 spikelets*

Field Brome-gr. Amongst corn. A. 7. Sche. 5. 15.

7. B. Pan. erect, pedunc. mostly simple, flor. lanceolate, somewhat cylindrical, root-leaves very narrow with hairy ciliae. SMITH. WITH. *erectus. Roots in tufts Culm 3 feet radical leaves long, stem leaves broad, flat Sheaths long - Pan. 5 or 6 flow'.*

Upright Peren. B. Chalky P. P. 7. E. Bot. 471. *as per. Peduncles very long, in hairs*

8. B. Pan. nodding, branched, flor. lanceolate, nearly cylindrical, almost nerveless, leaves uniform; lower leaves hirsute. SMITH. LIN. WITH. *facing one way - H. culm compressed, pubescent Culm 3 feet, 6 or 7*

Hairy Wood Brome-gr. Hedges, &c. A. 7. Curt. black'sil

9. B. Pan. nodding, mostly simple, flor. lanceolate, nerved, furrowed, leaves pubescent. SMITH. LIN. HUDS. WITH. *ster'ilis. Pedunc. semi-articulate spikelets oblong, rough Culm 3 feet - leaves hairy at bottom Sheaths pubescent*

Barren Brome-grass. Hedges. A. 6. 7. Curt.

10. B. Pan. erect spreading, somewhat branched, flor. lanceolate, nerved, furrowed, diandrous.

SMITH. CURT. B. madritensis. LIN. WITH.

Upright Annual Brome-gr. Walls, A. 6. Barr. 76. 1.

syloaticus. 11. B. Spike simple nodding 1-rowed, ^{2 rows (1 row)} spikel. sessile, rather cylindrical, awns longer than the glume, leaves hairy. SMITH. POLLICH. *Festuca sylvatica*. WITH. See Page 24.

Slender Wood Brome-gr. Hedges. — 7. Mart. 114.

pinna'tus. 12. B. Spike simple, erect, 2-rowed, spikel. sessile, rather cylindrical, awns shorter than the glume, leaves rather naked. SMITH. LIN. HUDS. *Festuca pinnata*. With. See Page 24.

Spiked Heath Brome-gr. Heaths, &c. 7. Barr. 25.

91. AVE'NA. Cal. 2-valved, many-flowered. Awn from the back (of the corol), twisted.

elo'tior. 1. A. Panicle, cal. 2-flowered; herm. floret sometimes awnless, male awned. Tall Oat-grass. Wet places. P. 6—8. Curt. 191.

2. A. Panicle; calyxes 3-flowered, shorter than the receptacle, petals awned on the back, the third floret awnless.

Naked Oat. ^{isornate} Staffordshire. A. 7. Mart. 80.

fat'ua. 3. A. Panicle, calyxes 3-flowered, all the florets awned, and hairy at the base.

Bearded Oat. Cornfields. A. 7. 8. Mart. 81.

4. A. Somewhat spiked, calyxes mostly 3-flowered, hairy at the base; leaves flat, downy.

Rough Oat. Dry chalky ground. P. 6. Leers 9. 2.

5. A. Panicle loose, calyxes 3-flowered, short; all the florets awned.

Yellow Oat. On a calcareous soil. P. 7. Curtis 212.

6. A. Somewhat spiked; calyxes 5-flowered.

Meadow Oat. Heaths, &c. P. 7. Leers 9. 1.

7. A. Panicle oblong, compact, pointing one way, florets in pairs, with two awns at the end, and a jointed awn on the back. SCHREB. WITH.

Amongst oats, North of England. A. —

93. ARUN'DO. Cal. 2-valved. Florets (awnless) heaped together, surrounded with wool at the base.

1. A. Panicle spreading, calyxes 5 flowered.

Common Reed. Ditches. P. 7. E. Bot. 401.

2. A. Cal. 1-flowered, even; cor. downy, culm branched. (Cal. 1-flowered, longer than the corol; pan. erect, flow. scattered, leaves linear. E. Bot.)

Calamagrostis lanceolata. With.

Small Reed. Moist woods. P. 6. E. Bot. 403.

Phragmites - Panicles dry woolly green. Culm forms a very durable screen in gardens against the wind, and is also used as a foundation for plaster floors - Inner sheath one of the culm forms a very sensible thermometer

solium temulentum - seeds ground with bread corn produce vertigo
if the bread is eaten hot - matted with barley and made into wine
it renders the drink very intoxicating - Sp. later even wheat flour
is deleterious -

TRIANDRIA. DIGYNIA. Arundo.

27

3. A. Cal. 1-flowered, pan. erect, leaves smooth underneath. (Cal. longer than the corol, pan. erect, branched, spreading, flow. crowded, leaning one way, leaves lanceolate. E. Bot.) Calamag. Epigejos. With. Wood Reed. Moist woods. P. 6. 7. E. Bot. 402.
4. A. Cal. 1-flowered, leaves involute, mucronato-pungent. Calamag. arenaria. With. Spikes long - Culm 4 feet Sea Mat-weed. Isle of Wight. P. 6. 7. F. D. 259. Leaves upright broad. See Calamag. arenaria, &c. Page 17. glauc. very smooth. Roots spreading
95. LOLIUM. Cal. 1-leaved, fixed, many-flowered. (Spikelets alternate. WITH.)
1. L. Spike awnless, spikelets compressed, many-flowered (longer than the calyx). Leaves deep green. Spikes 2 ranked. Rye-grass. Road sides. P. 6. E. Bot. 315. Mart. 4. compressed
- Var. 2. tenue. Spike awnless, cylindrical, spikelets 3-flowered. L. tenue. Lin.
- 3. broad-spiked. Spike compound. Scheuch. pr. 2.
2. L. Spike awned; spikelets compressed, many-flowered (not longer than the calyx, culm rough. WITH.) temulen'- Culm 2 feet tum. very bald below but rough above - leaves rough Darnel. Ploughed lands. A. 7. 8. F. Dan. 160. Spikes awned below the top
3. L. Spikelets awnless, rather shorter than the calyx; calyx 2-valved, culm smooth. WITH. Calm quite bald White Darnel. A. 7. H. ox. viii. 2. row 2. 1. n. 1. Leaves bald.
4. L. Pan. undivided, pointing one way, spikel. bromoides. awned. HUDS. Culm angular, many branched 6 inches high Sea Darnel. Sandy sea coasts. A. 5. 6. Ray 17. 2. Sheaths long. Partial 12 inches
96. ELYMUS. Cal. lateral, 2-valved, heaped together, many-flowered.
1. E. Spike erect, close, calyxes tomentous, longer than the floret. Spikelets 3 flowered downy in two rows on the top Sea Lime-gr. Sandy sea coasts. P. 7-8. Mart. 31. and bottom of spike in the middle of the middle
2. E. Spike nodding, close; spikel. straight without an invol., lowest in pairs. See Triticum caninum. Culm 2 feet. Leaves ribbed. Glume with a barbed 3 to 5 ribbed. florets 2 ranked.
3. E. Spike erect, spikelets 2-flowered, as long as the involucre. Hordeum sylvaticum. HUDS. Europeus. Spikelets in three rows. Wood Lime-grass. Woods. P. 6. Park. 1144. 7. Culm 2 feet sheaths ribbed
98. HORDEUM. Cal. lateral, 2-valved, 1-flowered, 3 together.

Obs. All the British species have 2 male and 1 perfect floret in each set; all the awns barbed; the inferior valve of the corol awnless; and an involucre of 2 awn-like leaflets to

(Couch-grass - Root-sweet used as food for horses in many countries - Also for man in time of scarcity or medicinally as a demulcent and aperient - It is also employed as a treacher in water in brewing, but being a troublesome weed in mosty tract

TRIANDRIA. DIGYNIA. Hordeum.

each floret and a third to the Herm. floret placed at the base, and on the outside of the inner valve of the corol, and about the length of the valve. See With.

- Culm 1 foot murinum. 1. H. Lateral florets male, awned, involucre of the intermediate florets ciliate.
 Culm at bottom like 3 inches
 Leaves light-green, rough
 praten'se. 2. H. Lateral florets male, awnless, involucre setaceous, rough. HUDS. WITH. H. murinum.
 Culm 10 inches, leaves
 spread, acute roughish
 B. Lin. Taste meadus eye-grass
 Meadow Barley. Moist past. P. 6. E. Bot. 409.
 Leaves flat maritimum. 3. H. Lateral florets male, awnless; middle floret herm. with a long awn. (Some of the involucre expanded at the base.) WITH. H. marinum.
 Soft & glaucous, num.
 Huds. Grass land by the sea
 Sea-side Barley. A. 6. 7. H. ox. viii. 6. 5.
 sylvaticum. 4. H. All the flor. herm. awned, calyxes growing together at the base, shorter than the awns.
 HUDS. See Elymus europæus. Page 27.

99. TRITICUM. Cal. 2-valved, solitary, mostly 3-flowered. Florets rather obtuse, but pointed. (Cal. alternate, upon a flexuose rachis. E. Bot.)

- Flower mostly junceum. 1. T. Calyx 5-flowered, truncated; leaves involute.
 9. ribbed like 1 inch
 Flower awnless leaves glaucous very moist
 Culm prostrate at bottom Root creeping
 re'pens. 2. T. Cal. 4-flowered, subulate, acuminate, leaves flat.
 Root creeping, white, jointed
 Spikelets oblong 4 flowered
 Culm 2 feet Leaves very
 spreading, nearly on round
 rough on upper surface & edge
 Couch-grass. Very common. P. 6—8. Schr. 26.
 Var. 2. Cal. 2—5-flowered, awnless. Schreb. 26.
 iii,
 — 3. Cal. 5—8-flowered, awns not a line long. Schreb. 26. ii.
 — 4. Cal. 4—6-flowered, awns 2—4 lines long. St. F. Dan. 748.
 — 5. Leaves sea-green, stiff, acute. Cal. 3—8-flowered, florets pointed. See With.

- Flower Barbed cani'num. 3. T. Cal. pointed, mostly 4-flowered, awns longer than the corol, spikel. erect. LIN. Sp. ed. i.
 Awn 3 to 5. ribbed root not creeping
 Culm 2 feet leaves ribbed green
 rough on both faces spike 3, 4 inch
 loliaceum. 4. T. Spike simple, compressed, spikel. ovate, all leaning one way, cal. many-flowered. E. Bot.
 Glume 3 inches many
 Flower's Culm soft much
 3 inches -
 WITH. Poa loliacea. HUDS.
 Sea-wheat. Sandy sea shores. A. 6. 7. E. Bot. 221.

87. CYNOSURUS. Cal. 2-valved, many-flowered (few-flowered, equal), Proper Receipt.

Flour of wheat - very nutritious on account of the gluten it contains which is in greater proportion in the wheat grown in warm countries than in cold. - Seed used for starch - Also fermented to make a beer called brown - straw cut into chaff to give horses an appetite by mechanical stimulus -

unilateral, leafy. (Cor. 2-valved, 1 valve concave, longer. Nect. 2-leaved. WITH.)

1. C. Bractes pinnatifid. (Spike linear.) *Portulaca* ^{crispa} *cristatus*. Culm 2 feet
Crested Dogs-tail. Common. P. 6. 7. Mart. 106. ^{peculiar at bottom &}
Var. 2. Spike 4-cornered. RAY syn. 399. ^{leaves striated}
2. C. Bractes ^{bristles by Scandula} pinnate, chaff-like, (segm.) awned, *echinatus*. =
(Spike lanceolate.) *Panicum* ^{ovate grey, growing silvery, shining}
Rough Dogs-tail. Sandy soil. A. 7. Park. 1168. 6. ^{leaves large, in fl.}
3. C. Bractes entire. (Spikes nearly ovate. JACQ.) *caruleus*.
See *Sesleria carulea*.

1360. ROTTBOEL'LA. *Rachis* flexuose, jointed, rather cylindrical, mostly filiform. Cal. ovato-lanceolate, flat, simple, or 2-parted. Flor. alternate. (Cal. 1 or 2-valved. Car. 2-valved, awnless. WITH.)

1. R. Spike cylindrical, subulate, calyx glume incurva'ta.
subulate, appressed, 2-parted. SUP. p. 114. ^{Spikes 2 smooth}
Ægilops incurvata. Syst. veg. ed. 13. ^{florid}
Sea Hard-grass. Sea coast. P. 7. 8. F. Dan. 938. ^{leaves charred}
^{subulate}

TRIGYNIA.

100. ERIOCAU'LON. Com. Calyx an imbricated head. Petals 3 equal. Stam. above the ger-men. (Male flor. in the disk. 1-petalled. Fem. flor. in the circumference 2-petalled. Petals with a black dot within the apex. See Syst. Veg. ed. 14.)

1. E. Culm 10-cornered, leaves ensiform. ^{decangula're.}
Nasmythia articulata. Huds. E. septangulare. ^{scape sheathed}
With. ^{leaves cellular}
Wreathed Pipewort. Lakes in the Isle of Skye. ^{compressed, sword-}
P. 7. Phil. Trans. 59. 241. ^{shape - scape}
Obs. The British plant is monoicous, and tetrandrous; its
scape has 7 angles, and is sheathed at the base. From
these circumstances Hudson has been induced to con-
struct a new genus for it, and has placed it in class XXI,
ord. IV. With. has placed it in cl. IV. ^{such a span high}
^{leafy - head}
^{hemispherical}
^{white & black}

101. MON'TIA. Cal. 2-leaved. Cor. 1-petalled, irregular. Caps. 1-celled, 2-valved.

1. MONTIA. ^{culm creeping, reddish} ^{fonta'na.}
Water Blinks. Wet heaths. A. 5. Curt. 188. ^{flowers small}
^{leaves spatulate} ^{white in peduncles}

105. POLYCAR'PON. Cal. 5-leaved. Pet. 5, very minute, ovate. Caps. 1-celled, 3-valved.

calyx tetraphyll' - 1. P. Stem prostrate, branched, leaves four together. - leaves fleshy, flowers numerous
spike-like shape lum. at the bottom
 Four-leaved All-seed. Sandy pl. A. 5-9. Barr. 534.

104. HOLOS'TEUM. Cal. 5-leaved. Pet. 5. Caps. 1-celled, nearly cylindrical, opening at the top.

umbella'- 1. H. Flowers in umbels. Corastium umbellatum.
tum. Huds.

Umbelliferous Mouse-ear. Walls. A. 4. 5. E. Bot. 27.

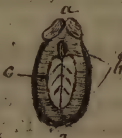
Stem above base of leaves, Petals white almost entire - Fruit Pendant
Leaves ovate acute - Stem viscid at top



4



3



2



1



7

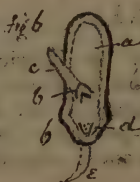
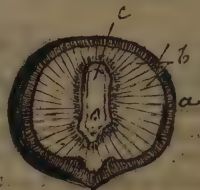


fig 6



5

1 Castor oil seed a the arilleform caruncula

2 The same cut longitudinally, a the caruncula, b the Endosperm or albumen c the embryo

3 The embryo separated from the inter? of the albumen a the radicle, b, b the cotyledons, c the gemmule

4 The same seed cut across -

5 A seed of the indian shot, (Canna indica) cut longitudinally, a its episperm, b its endosperm c its monocotyledonous embryo

6 The embryo of indian shot separated, a the Cotyledon, b the gemmule or bud, inclosed in the cotyledon, which in growing pierces the cotyledon laterally, and becomes c d the radicle enclosed in the coleorhiza, which it must pierce at 2. in order to sink in the earth - See 156. fig 4, E, F -

7 Triticum sativum, its monocotyledonous embryo, being laid bare

CLASS IV.

TETRANDRIA.

MONOGYNIA.

1. Flowers 1-petalled, 1-seeded, superior.

AGGREGATÆ.

114. DIP'SACUS. Cal. common, leafy. Recept. conical, chaffy. Seeds columnar.
 115. SCA'BIO'SA. Cal. common, many-leaved. Recept. elevated, somewhat chaffy. Seeds crowned, involute (rolled in a cover. WITH.).

(III. *Eriocaulon decangulare.*)

2. Flowers 1-petalled, 1-fruited, inferior.

145. CENTUN'CULUS. Cor. rotate. Cal. 4-parted. Caps. 1-celled, cut round (opening horizontally).
 142. PLANTA'GO. Cor. refracted. Cal. 4-parted. Caps. 2-celled, cut round.
 141. EX'ACUM. Cor. somewhat campanulate. Cal. 4-leaved. Caps. 2-celled, compressed.

(V. *Gentiana campestris* and *filiformis*. XXI. *Littorella.*)

3. Flowers 1-petalled, 1-fruited, superior.

146. SANGUISOR'BA. Cor. flat. Cal. 2-leaved. Caps. 4-cornered, between the corol and calyx.

4. Flowers 1-petalled, 2-berried, superior.

STELLATÆ.

127. RU'BIA. Cor. campanulate. Fruit berry-like.
 125. GA'LIIUM. Cor. flat. Fruit almost globular.
 121. ASPER'ULA. Cor. tubular. Fruit nearly globular.

TETRANDRIA.

120. *SHERAR'DIA*. Cor. tubular. Fruit crowned.
Seeds 3-toothed.

(XXIII. *Valantia*.)

5. Flowers 4-petalled, inferior.

148. *EPIME'DIA*. Pet. 4, nectariferous, incumbent. Cal. 4-leaved. Silique 1-celled.

(V. *Euonymus europæus*. XV. *Cardamine hirsuta*.
XXIII. *Parietaria officinalis*.)

6. Flowers 4-petalled, superior.

149. *COR'NUS*. Cal. 4-toothed, deciduous. Drupe
a 4-celled nucleus.

7. Flowers incomplete, inferior.

165. *ALCHEMIL'EA*. Cal. 8-cleft. Seed 1, in-
closed in the calyx.

(IV. *Aphanes*. XXI. *Urtica*. XXIII. *Parietaria*.)

8. Flowers incomplete, superior.

(V. *Thesium alpinum*. XX. *Ophrys Corallorrhiza*.
XXII. *Viscum*. *Hippophae*.)

DIGYNIA.

166. *APH'ANES*. Cor. o. Cal. 8-cleft. Seeds 2.

168. *BUFO'NIA*. Cor. 4-petalled. Cal. 4-leaved.
Caps. 1-celled, 2-valved, 2-seeded.

170. *CUSCU'TA*. Cor. 4 (or 5) cleft, ovate. Cal.
4-cleft. Caps. 2-celled, cut round.

(IV. *Galium Mollugo et Aparine*. V. *Herniaria glabra*.
Gentiana campestris et filiformis. *Swer-
tia*. XXI. *Betula*. XXII. *Myrica*.)

TRIGYNIA.

(XXI. *Buxus*.)

TETRAGYNIA.

172. *I'LEX*. Cor. 1-petalled. Cal. 4-toothed.
Berry 4-seeded.

176. *SAGI'NA*. Cor. 4-petalled. Cal. 4-leaved.
Caps. 4-celled, many-seeded.

Dipsacus fulcrum - Heads used to raise the rag-woollier cloth to hide the interwoven texture

Scabiosa succisa - Heads yellow and green - a strong disagreeable odor - *Scabiosa*

TETRANDRIA.

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177. TILLÆ'A. Cor. 3 or 4-petalled. Cal. 3 or 4-leaved. Caps. 3 or 4, many-seeded.

174. POTAMOGE'TON. Cor. o. Cal. 4-leaved. Seeds 4, sessile.

175. RUP'RIA. Cor. o. Cal. o. Seeds 4, pedicelled.

(III. *Holostium umbellatum*. V. *Linum Radiola*.)

MONOGYNIA.

114. DIP'SACUS. Cal. common many-leaved; pro- calyces 3. outer scales scales per superior. Recept. chaffy. *reflected second angular, inner perianth*

1. D. Leaves sessile, serrated, chaff recurved. *fullo'num?* *Stem 3 feet*
WITH. D. fullonum β. Lin. Huds. *Leaves bald.*

Manured Teasel. B. 7. F. Dan. 965. Ger. 1167. 1.

2. D. Leaves entire (opposite, connate); chaff sylves'tris. *Dark leaves*
straight. D. fullonum. α. Huds. *strate - Stem 6 feet, serrate*

Wild Teasel. Uncultiv. places. B. 6—8. Curt.

3. D. Leaves petioled, appendiculate.

Small Teasel. Damp places. B. 8. Curt. *pilo'sus. Leaves pale*

115. SCABIO'SA. Cal. common many-leaved; pro- *Corolla white*
per double, superior. Recept. chaffy, or naked. 3 calyces outer. *cal. few*
ed. (Seed wrapped in the proper calyx. *lanceolate, inner sessile*)
WITH.) *2 calyces 4 toothed free - inner calyx 5 toothed sessile*

1. Corols 4-cleft.

1. S. Cor. 4-cleft, equal, stem simple, branches ap- succi'sa. *Root thickened*
proximate, leaves lanceolato-ovate. *Flowers blue, white &*

Devil's-bit Scabious. Pastures. P. 6—8. Curt. *fls. colour*

2. S. Cor. 4-cleft, radiating, leaves pinnatifid, in- arven'sis. *Stems 3 f.*
cised, stem hispid. *Flowers numerous blue*

Field Scabious. Cornfields. P. 7. 8. Curt. 288. *intercalyx imbricate in many*

2. Corols 5-cleft. *series 2 3 4 cut - inner many cut*

3. S. Cor. radiating, root-leaves ovate, crenate, columba'-
stem-leaves pinnate, setaceous. *leaves downy*

Small Scab. Dry hilly places. P. 6—9. Ger. 719. 2.

145. CENTUN'CULUS. Cal. 4-cleft. Cor. 4-cleft,
spreading. Stam. short. Caps. 1-celled, cut
round.

1. CENTUNCULUS. *Flowers in the old of min'imus. The leaves*
Bastard Pimpernel. Moist sandy gr. A. 6. Curt. *white and minute*
near the Papu on the Houslow heath. Flowers open

142. PLANTA'GO. Cal. 4-cleft. Cor. 4-cleft, lim-
bus reflected. Stam. very long. Caps. 2-cell-
ed, opening horizontally. *only at the hottest part*
of the day

- Corolla 4 lob.* *ma'jor.* 1. P. Leaves ovate, smooth, scape cylindrical, spike with imbricated florets. *Great Plantain.* Road sides, P. 6—8. *Curtis.*
anthers oblong
stalk naked *for 10*
spike 3 or 4 flowered
inches long, cylindrical
The leaves have 7
longitudinal ribs
leaves applied as a
creeping lichen wound
me'dia. 2. P. Leaves ovato-lanceolate, pubescent; spike cylindrical, scape cylindrical.
Hoary Plant. On a calcareous soil. P. 6—8. *Curt.*
lanceola'ta. 3. P. Leaves lanceolate, spike nearly ovate, naked, scape angular.
Ribwort Plantain. Road sides. P. 6. *Curt. Mart.* 67.
 Var. 2. Leaves narrow, 3-ribbed. *STOKES. Ger.* 339. 4.
 — 3. *foliosa.* Summit of the scape surrounded with leaves longer than the spike. *WOODW. Gerard.* 341, 2. *Stokes.*
 — 4. Spikes 3 inch. long, divided into 2 or 3 lateral ones at the base; scapes 2 feet high, deeply furrowed; leaves more than a foot in length, somewhat toothed, 5-nerved. *LEERS. P. 50. See With.*
marit'ima. 4. P. Leaves semi-cylindrical, very entire, woolly at the base, (spike and) scape cylindrical.
Sea Plantain. Sea coast. P. 6. 7. *E. Bot.* 175.
 Var. 2. *narrow-leaved.* Leaves filiform.
 — 3. *flat-leaved.* Leaves flat, ribbed, sparingly toothed. *J. B. iii.* 506. 2.
cord'nopus. 5. P. Leaves linear, toothed, scape cylindrical. (Leaves pinnato-dentate. *Huds.* Anthers terminated by a small lanceolate membrane. *W.*)
Leaves in the form of a star. *Bucks-horn Plan.* Sea shore. A. 6—8. *F. Dan.* 272.
 Var. 2. Leaves more deeply divided, more hairy; heads short, lax. *BLACKST.* p. 77.
 — 3. Leaves linear, very entire, hairy, spike roundish. *DILL. in RAY syn.* 316.
 — 4. Leaves serrato-dentate. *STOKES. Pet.* 4. 9.

Obs. *P. Laesslingii* is by Huds. made a var. of *P. maritima*. By others *P. cornubus* var. 1. in a smaller state has been supposed to be Laessling's plant. But the bractes of our plant are always hairy, especially on the keel, and the root-leaves pinnatifid; whereas in *P. Lef.* the bractes are stated to be smooth, and the root-leaves never pinnatifid. The following char. is given of it by Lin. "Leaves linear, somewhat toothed, scape cylindrical, spike ovate, bractes keeled, membranous." See Huds. and With.

141. EX'ACUM. Cal. 4-cleft (or 4-leaved). Cor. 4 (or 5) cleft, tube globular. Caps. 2-furrowed, 2-celled, many-seeded, opening at the top. (Stigma capitate.)

1. E. Cor. 4-cleft, on long peduncles, leaves sessile; stem (filiform) dichotomous. E. BOT. WITH. *Gentiana filiformis*. Lin. Least *Gentian*. Boggy places. A. 7. E. Bot. 255.

146. SANGUISOR'BA. Cal. 4-leaved, Germ. between the cal. and cor.

1. S. Spikes ovate, *leaflets heart-shaped, crenate* officinalis. Stem 3 feet. Great Burnet. Moist mead. P. 6—8. Mart. 142. round, striated smooth and hollow.

127. RU'BIA. Cor. 1-petalled, campanulate. Berries 2, 1-seeded. (Berry 2-seeded, WITH.)

1. R. Leaves annual, stem prickly. *Roots small, agreeable as a fine red col.* tinctorum.

Var. 1. *Anglica*. Leaves smooth, shining, deciduous. Cor. 5-parted. Stam. 5. R. *peregrina*. Huds. *Stem 1 ft long, sq. Leaves 4 at each of 1/2* Wild Madder. Hedges, &c. P. 6. 7. Pet. 30. 3. *Flowers on the tops of the branches, yellow, small*

125. GA'LIUM. Cor. 1-petalled, flat (campanulate, short. WITH.). Seeds 2, nearly round. *Calyx very small. Petals reddish.*

1. Fruit smooth.

1. G. Leaves 4 together, ovate, hairy, stem simple above, hairy, racemes lateral, 2-leaved, flow. polygamous. E. BOT. WITH. See *Valantia cruciata*.

2. G. Leaves 4 (—6) together, unequal, obovate *palus'tre. Stem 10 Inch.* (lineari-lanceolate. WITH.): Stems diffuse, *depressed, 4 sided rough. Flowers numerous, white.*

White Lady's-bedstraw. Moist pl. P. 7. F. Dan. Peduncles umbellated 3 forked flowers

3. G. Leaves about 4 together, linear, smooth, *mont'num.* stem feeble, rough. (Leaves reflected. WITH.). *Stem 9 inches, flowers* — High boggy situations. — 7. With. Pl. 27. *before opening purplish afterwards white; anthers red*

Calcium verum - (Look aye a fine red - Flowers small
like honey, they are antispasmodic - With alum they dye a
fine yellow - and coagulate milk when boiled in it

- Panicle 3 forked procumbens.*
Cordia milky.
Leaves reverse-ovate
- Stem 8 In. ch. uliginosum.*
in ch. angles aculeatum.
Flowers white in cluster
- Hamblestead Heath*
- Stem 5 Inches pusillum.*
Flowers white
erectum.
Cordia white, pointed
- Stem 3 feet mollugo.*
Flowers, small, white
hirsutous.
scabrum.
Peduncles in threes
Lowest leaves small withering
Cordia white not pointed
- Root dark green - velum.*
Flowers small yellow
they smell like honey
an'glicum.
Root fibrous
Stem 9 inches
Cordia yellowish green
4. G. Leaves lanceolato-ovate, 4—6 together, mucronate, smooth, spreading, stem prostrate, smooth. WITH. G. montanum. Huds. Trailing Goose-grass. Heaths, &c. — 7. Pet. 30. 6.
5. G. Leaves 6 together, lanceolate, serrato-aculeate backwards, mucronate, stiff, corols larger than the fruit. white. Peduncles 2 or 3 cut Marsh Goose-grass. Wet heaths, &c. P. 7. Bar. 82.
Obs. The prickles at the margin of the leaves, and the dagger-like point distinguish this species from G. montanum, and its smooth stem from G. palustre. WITH.
6. G. Leaves 8 together, hispid, linear, acuminate, somewhat imbricated (below), pedunc. dichotomous. Westmoorland mountains. Least Goose-gr. Limestone hills. P. 7. 8. E. Bot. 74.
7. G. Leaves about 8, lanceolate, aculeato-serrulated, mucronate, panicles trichotomous, stem rough, flaccid. HUDS. & much branched. Upright Goose-gr. Meadows. P. 6. 7. Jacq. Aust. 80.
8. G. Leaves 8 together, ovato-linear, somewhat serrated, mucronate, widely-spreading, stem flaccid, branches spreading. Leaves small. P. 6. 7. Madder Goose-grass. Heaths. P. 6—8. F. Dan. 455.
9. G. Leaves about 8 together, rough, mucronate, flower-bearing branches mostly trichotomous. JACQ. (Furrowed; stem and leaves pubescent. STOKES.) Downy-stalk G. Hedge-rows. P. 8. Jacq. A. v. 422.
10. G. Leaves 8 together, linear, furrowed, flower-bearing branches short. Anthers brown after discharging the Pollen. Panicle small. Yellow Lady's-bedst. Road sides. P. 7—10. Mart. 54.
11. G. Leaves about 6 together, lanceolate, aculeato-ciliate, acuminate, reflected, stems diffuse, rough with prickles pointing downwards. HUDS. (Pedunc. dichotomous.) Small Goose-grass. Walls, &c. A. 6. 7. E. Bot. 384.
2. Seeds hispid.
- Stem 1 foot boreale.*
Flowers small white
on the tops of the branches
12. G. Leaves four together, lanceolate, 3-nerved, smooth, stem erect. Leaves 3 ribbed. Cross-leaved Goose-gr. Mount. P. 7. 8. E. Bot. 105.
13. G. Leaves 8 together, lanceolate, keels rough with prickles pointing backwards, joints woolly. Stem weak. Cleavers. Hedges. A. 6. 7. Curtis. Mart. 104.
- Stem square, very rough, jointed 2 or 3 ft. joints hairy*
at the base - leaves 8 or 10 on each joint
Flowers white, small, few, on slender foot stalks on
the tops of the branches.

Asperula odorata when drying exhales a pleasant fragrance]
Galium aparine - Branches used as a sieve to strain milk;
 a favorite food of young geese; juice antiscorbutic. Seeds roasted
 for coffee
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TETRANDRIA. MONOGYNIA. *Asperula.* 37

121. *ASPER'ULA.* Cor. 1-petalled, funnel-shaped.

Seeds 2, globular.

1. A. Leaves 8 together, lanceolate, flowers in penduncled fascicles. *Flowers white* - *stem upright*
 Sweet Woodroof. Woods. P. 5. Curt. 249. *Panicle forked in three*

2. A. Leaves 4 together, linear, upper ones opposite, stem (rather) erect, flowers 4-cleft.

Squinsancy Woodr. Limest. hills. P. 6. 7. E. B. 33.

120. *SHERAR'DIA.* Cor. 1-petalled, funnel-shaped. Seeds 2, naked, crowned by the calyx.

1. S. All the leaves verticillate; flowers terminating, umbellid, leaves 6 in a whorl - *Involution 8 leaves*

Little Field-madder. Cornfields. A. 5-9. Curt. *Flowers blue*

148. *EPIME'DIUM.* Nect. 4, glass-shaped, leaning on the petals, Cor. 4-petalled. Cal. caducous. Pericarp a Silique.

1. *EPIMEDIUM.*

Barren-wort. On Skiddow. P. 7. E. Bot. 438.

149. *COR'NUS.* *Involution* generally 4-leaved.

Pet. 4. superior. *Drupe* with a 2-celled nucleus. (Cal. 4-toothed. Pet. 4. *Drupe inferior.* Nut 2-celled. E. Bot.)

1. C. Arboreous, cymes naked, branches erect.

Dog-berry Tree. Hedges. P. 6. E. Bot. 249.

2. C. Herbaceous, branches 2 together (generally the flow. between them). C. Herbacea. Huds.

Dwarf Honeysuckle. Pentland h. P. 6. 7. E. B. 310.

165. *ALCHEMIL'LA.* Cal. 8-cleft. Cor. o. Seed

1 (or 2, inclosed by the calyx).

1. A. Leaves lobed, palmate & stipuled, kidney sh.

Com. Lady's-mantle. Past. P. 5-9. F. Dan. 693.

Var. 2. minor. Leaves pubescent, lobed.

Huds. Barr. 728. *a fan, pale green*

2. A. Leaves digitate, serrated.

Cinquefoil Lady's-mant. Rocks. P. 7. E. Bot. 244.

Leaves pale green above, silver green beneath

Flowers greenish

DIGYNIA.

166. *APH'ANES.* Cal. (4 or) 8-cleft. Cor. o.

Seeds (1 or) 2, naked.

1. A. Leaves 3-lobed. (Var. with one pistil.)

Parsley piert. Pastures. A. 5-8. F. Dan. 973.

Stem 3 or 4 inches long, procrembent, covered with hairs - *Flowers small, greenish white, in clusters among the leaves* -

Obs. It is made a species of *Alchemilla* by Leers, who assures us that there is only one seed. F. HERB. P. 54.

168. *BUFO'NIA*. Cal. 4-leaved. Cor. 4-petalled. Caps. 1-celled, 2-seeded.

Flowers in tenuifolia. 1. *BUFONIA*. (Var. with 2 stamens.)
the old of the leaves Bastard Chickweed. Sea coast. P. 5. 6. Pluk. 75. 3.
Small and white 170. *CUS'CUTA*. Cal. 4- (or 5) cleft. Cor. 1-pe-
the leaflets turning, parasitic talled. Caps. 2-celled.

Flowers in europaea. 1. C. Flow. sessile. (Flow. nearly sessile; cor. with-
clusters on the stalk but scales; stigmas simple. E. BOT.

white stem twisted Greater Dodder. On nettles. A. 8. 9. E. Bot. 378.
calyx reddish 2. C. Flow. sessile, 5-cleft, fenced by bractes. (Flow.
herb leafy sessile; a ciliate scale close to the base of each
injury - parasitic stamen, stigm. simple. E. BOT.)

Less Dodder. On Heath. — 8. 9. E. Bot. 55.

Var. 2. Cal. fleshy at the base, 5-cleft, cor. 5-
 cleft, stam. 5, pist. 2, seeds 2. WITH.

TETRAGYNIA.

leaves alternate, lower hairy, upper unmarked 172. *I'LEX*. Cal. 4-toothed. Cor. rotate. Style
peduncles axill many 2 bracted o. Berry 4-seeded.

Flowers small, aquifolia 1. *I.* Leaves ovate, acute, thorny. *hairy, waxy*.
whitish Common Holly. Woods, &c. P. 5. F. Dan. 508.

leaves linear, pointed, petals short 176. *SACINA*. Cal. 4-leaved. Pet. 4. Caps. 1-
flower small, proccumbent celled, 4-valved, many seeded.

green white 1. S. Branches procumbent. (Var. without petals.)
leaves axill hairy Chickweed Breakstone. Walls. &c. P. 6. Curt.

leaves axill hairy 2. Stem rather erect, pubescent, flowers alternate,
leaves many not rooting apetalous. (Petals very minute. STOKES, emar-
 ginate. WITH.)

leaves glaucous 3. S. Stem erect, generally 1-flowered. *on the top*
leaves lanceolate, acute Annual Pearlwort. Walls, &c. A. 5. 6. Curt.

leaves lanceolate, acute 4. S. Stem diffuse, dichotomous; leaves spatulate,
leaves lanceolate, acute or obovate, recurved; pedunc. of the ripe fruit
 reflected. E. BOT. See *Cerastium tetrandrum*.

177. *TILLÆA*. Cal. 3 or 4-parted. Pet. 3 or 4, e-
 qual. Caps. 3 or 4, many-seeded.

leaves filiform 1. *T.* Procumbent, flowers 3-cleft. (Stam. 3.)
leaves heart-shaped - stem red Mossy Red-shanks. Heaths. P. 5. 6. E. Bot. 116.

leaves solitary 174. *POTAMOGETON*. Cal. o. Petals 4. Style o.
 Seeds 4.

leaves aquifolium - Wood Land, smooth back, yellow. *in a wire*
leaves a great resource for small birds in winter, and a
in cholin

TETRANDRIA. TETRAGYNIA. Potamogeton. 39

- Flowers small, yellowish on spikes of 2 inch.*
1. P. Leaves oblongo-ovate, petioled, floating. *natans. above water*
Broad-leaved Pondweed. Pits. P. 7. 8. F. Dan. 1025. *lower leaves linear, submerged*
 2. P. Leaves cordate, embracing the stem. *perfolia' - Flowers*
Perfoliate Pondweed. Ponds. P. 6—8. E. Bot. 168. *tum. yellow.*
 3. P. Leaves ovate, acuminate, opposite, crowded, stems dichotomous, spike 4-flowered. *Stalk 2 or 3 feet.*
Close-leaved Pondw. Ditches. P. 5. 6. E. Bot. 397. *flowers dich. - Plant near water, spike above*
 4. P. Leaves lanceolate, flat, ending in peduncles. *bu' cens.*
(Leaves very long and spear-shaped, sessile, *Plant under water -*
upper ones opposite. WITH.) *spike above, fl. reddish*
Long-leaved Pondw. Ponds. P. 6. 7. F. Dan. 195.
Var. 2. Leaves ovate, petioled. E. Bot. 376.
 5. P. Leaves lanceolate, alternate or opposite, undulated, serrated. (Stem compressed, with 2 *cris'pum. Double,*
grooves, one on each side.) *leaves sunk.*
Curled Pondweed. Pits, &c. P. 5. 6. Curt. 5. *Flow. white or reddish on p. stalks*
 6. P. Leaves linear, obtuse, stem compressed. *compres' - Peduncle flat*
Flat-stalked Pondw. Ditches. P. 6. 7. E. Bot. 418. *sum. rising above water*
 7. P. Leaves setaceous, parallel, approximate, 2-rowed. *Flow. small greenish on short spikes.*
Fennel-leaved Pondw. Ponds. P. 5—7. E. B. 323.
 8. P. Leaves lanceolate, opposite, acuminate. *seta' ceum.*
Setaceous Pondweed. Peaty ditches. P. 7. 8.
 9. P. Leaves lineari-lanceolate, alternate, sessile, *gramin' - Stem erect*
broader than the stipules. *ceum. rather forked*
Grass-leaved Pondw. Ditches. P. 7. F. Dan. 222.
 10. P. Leaves linear, alternate, distinct, sheathing *marit' num.*
the stem below. *from reddish - joints short, sheath white leaves*
Sea Pondw. Saltwater ditches. P. 7. 8. F. Dan. 186. *opaque shining*
 11. P. Leaves linear, opposite and alternate, distinct, spreading from the base, stem cylindrical. *pusill' lum.*
Plant sunk except the spike when in flower
Small Pondw. Ponds. A. P. 6—8. E. Bot. 215.
175. RUP'PIA. Cal. o. Cor. o. Seeds 4, pedicelled. *Flowers two rounded on a solitary pedicel*
1. RUP'PIA. Plant herbaceous, caule branchy. *marit' ima. Leaves cordate*
Tassel Pondw. Saltw. ditches. A. P. 7. 8. E. Bot. 136. *linear not veined*

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Cornus sanguinea - Wood hard smooth used for stems. }
leaves change to blood red in autumn. Drupes black. }
shiny deep purple, long in ripening, when ripe yields }
a viscid oil - }

to meg. crispum
Flower magnified
one of the Pits. mag?



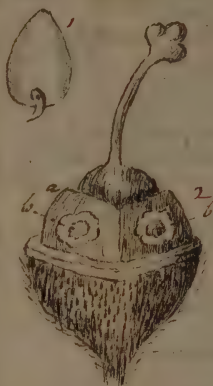
Fig 1 *Myosotis palustris* - an ovary separated from the receptacle and magnified -

Fig 2 Receptacle of the same also magnified, the ovaries having been removed - a. the receptacle supporting the style, without any intermedium - b. the places from whence the ovaries have been detached.

CLASS V.

PENTANDRIA.

MONOGYNIA.



1. Flowers 1-petalled, inferior, 4-seeded.

ASPERIFOLIAE.

180. MYOSO'TIS. Cor. throat arched, hypocrateriform, lobes emarginate.
181. LITHOSPER'MUM. Cor. naked, funnel-shaped. Cal. 5-parted.
182. ANCHU'SA. Cor. throat arched, funnel-shaped, tube prism-shaped at the base.
183. CYNOGLOS'SUM. Cor. throat arched, funnel-shaped. Seeds depressed, fixed laterally.
184. PULMONA'RIA. Cor. throat naked, funnel-shaped. Cal. prismatic.
185. SYM'PHYTUM. Cor. throat toothed, ventricose.
188. BORA'EO. Cor. throat toothed, rotate.
189. ASPERU'GO. Cor. throat arched, funnel-shaped. Fruit compressed.
190. LYCO'P'IS. Cor. throat arched, funnel-shaped, tube curved.
191. E'CHIUM. Cor. throat naked, irregular, campanulate.

2. Flowers 1-petalled, inferior: seeds in a vessel.

197. PRI'MULA. Caps. one-celled. Cor. funnel-shaped, throat pervious. Stigma globular.
201. CYCLA'MEN. Caps. 1-celled, pulpy within. Cor. reflected. Stigma acute.
202. MENYAN'THES. Caps. 1-celled. Cor. villos. Stigma bifid.
203. HOTTO'NIA. Caps. 1-celled. Cor. tube below the stamens. Stigma globular.
205. LYSIMA'CHIA. Caps. 1-celled, (5 or) 10-valved. Cor. rotate. Stigma obtuse.

Borago &c - The Change in the Color of the *Boraginæ* is general, from bright red to a vivid blue as the flower appears apparently caused by the loss of some acid principle is a very curious phenomenon - In G. of Bot -

PENTANDRIA. MONOGYNIA.

206. *ANAGAE'LIS*. *Caps.* 1-celled, cut round. *Cor.* rotate. *Stigma* capitate. *Tepidium*
212. *AZA'LEA*. *Caps.* 5-celled. *Cor.* campanulate. *Stigma* obtuse.
215. *CONVOL'VULUS*. *Caps.* 2-celled, 2-seeded. *Cor.* campanulate. *Stigma* bifid.
217. *POLEMO'NIUM*. *Caps.* 3-celled. *Cor.* 5-parted. *Stamens* standing on the valves.
245. *VERBAS'CUM*. *Caps.* 2-celled. *Cor.* rotate. *Stigma* obtuse. *Stamens* declining.
255. *CHIRO'NIA*. *Caps.* 2-celled. *Cor.* tube urceolate. *Anth.* after shedding the pollen spiral.
247. *HYOSCY'AMUS*. *Caps.* 2-celled, covered with a lid. *Cor.* funnel-shaped. *Stigma* capitate.
246. *DATU'RA*. *Caps.* 2-celled, 4-valved. *Cor.* funnel-shaped. *Cal.* deciduous.
295. *VIN'CA*. *Follicles* 2, erect. *Cor.* hypocrateriform. *Seeds* simple.
251. *SOLA'NUM*. *Berry* 2-celled. *Anthers* twice perforated.
249. *AT'ROPA*. *Berry* 2-celled. *Stam.* distant, incurved.

(*Gentiana*. *Centaurium*. XIX. *Lobelia*.)

3. Flowers 1-petalled, superior.

222. *SAM'OLUS*. *Caps.* 1-celled, 5-valved at the top. *Cor.* hypocrateriform. *Stigma* capitate.
218. *CAMPAN'ULA*. *Caps.* 3 or 5-celled, perforated. *Cor.* campanulate. *Stigma* 3-cleft.
220. *PHYTEU'MA*. *Caps.* 2 or 3-celled, perforated. *Cor.* 5-parted. *Stigma* 2 or 3-cleft.
233. *LONICE'RA*. *Berry* 2-celled, roundish. *Cor.* unequal. *Stigma* capitate.

(*Viburnum*. *lantana*. IV. *Rubia*.)

4. Flowers 5-petalled, inferior.

265. *RHAM'NUS*. *Berry* 3-celled, round. *Cal.* tubular, bearing the corol. *Scales* 5 at the mouth, converging.
271. *EUON'YMUS*. *Berry* capsular, lobed. *Cal.* spreading. *Seeds* in a berry-like aril.

(XIX. *Viola*. *Impatiens*.)

5. Flowers 5-petalled, superior.

281. *RI'BES*. *Berry* many seeded. *Cal.* corol-bearing. *Style* bifid.



a The anther of a *Solanum* opening by a pore at the top of each cell -

b The two-celled anther of a *Laurus nobilis*, the cells opening by small flaps -

PENTANDRIA. MONOGYNIA.

283. HED'ERA. Berry 5-seeded, Cal. clasping the fruit. Style bifid.

(XIX. Jasione.)

6. Flowers incomplete, inferior.

290. ILLECE'BRUM. Caps. 1-seeded, 5-valved. Cal. simple, inelegant.

291. GLAUX. Caps. 5-seeded, 5-valved. Cal. simple, rather inelegant, campanulate.

(Chenopodium maritimum. Salsola. VIII. Polygonum amphibium. XXII. Salix Pentandra. XXIII. Atriplex.)

7. Flowers incomplete, superior.

292. THE'SIUM. Seed 1-crowned. Cal. stamiferous.

DIGYNIA.

1. Flowers 1-petalled, inferior.

321. SWER'TIA. Caps. 1-celled, 2-valved. Cor. rotate, with 5 nectariferous pores.

322. GENTIA'NA. Caps. 1-celled, 2-valved. Cor. tubular, indeterminate. (Recept. of the seeds 2. WITH.)

(IV. Cuscuta.)

2. Flowers 5-petalled, inferior.

(Staphylea pinnata.)

3. Flowers incomplete.

309. CHENOPO'DIUM. Seed 1, orbicular. Cal. 5-leaved, leaflets concave. (Cal. 5-parted. WITH.)

310. BE'TA. Seed 1, reniform. Cal. 5-leaved, containing the seed in its base.

311. SAL'SOLA. Seed 1, cochleate, covered. Cal. 5-leaved.

308. HERNIA'RIA. Seed 1, ovate, covered. Cal. 5-parted. Filam. 5 barren (5 perfect).

316. UL'MUS. Berry juiceless, compressed. Cal. 1-leaved, shrivelling.

(IV. Cuscuta europæa. V. Staphylea pinnata. VIII. Polygonum amphibium. X. Scleranthus. XXI. Quercus.)

3. *Flowers 5-petalled, superior, 2-seeded.*

UMBELLATE.

A. *Involucre universal, and partial.*

Obs. As the universal Invol. are in some cases very deciduous, it will be proper to examine the umbel, before it is fully expanded.

324. ERYN'GIUM. *Flowers* capitate. *Recept.* chaffy.
 325. HYDROCOT'YLE. *Flowers* somewhat umbellate, fertile. *Seeds* compressed.
 326. SANIC'ULA. *Flowers* somewhat umbellate, (central ones) abortive. *Seeds* muricated.
 345. HERACLE'UM. *Flowers* radiate, (difform; some) abortive. *Invol.* deciduous. *Seeds* membranous.
 352. QENAN'THE. *Flowers* radiate, (generally) abortive in the ray. *Invol.* simple. *Seeds* crowned, sessile.
 329. ECHINOPH'ORA. *Flowers* radiate, some abortive. *Invol.* simple. *Seeds* sessile.
 331. CAUCALIS. *Flowers* radiate, (central ones) abortive. *Invol.* simple. *Seeds* muricated.
 333. DAU'CUS. *Fl.* radiate, (central ones) abortive. *Invol.* pinnate. *Seeds* hispid.
 330. TORDYL'IUM. *Fl.* radiate, all fertile. *Invol.* simple. *Seeds* crenate at the margin.
 339. PEUCED'ANUM. *Fl.* flosculous (uniform, central ones) abortive. *Invol.* simple. *Seeds* depressed, striated.
 336. CO'NIUM. *Fl.* flosculous, fertile. *Pet.* cordate. *Seeds* gibbous, ribbed and furrowed. *Involucell* halved.
 335. BU'NIUM. *Fl.* flosculous, fertile. *Pet.* cordate. *Involucell* setaceous.
 338. ATHAMAN'TA. *Fl.* flosculous, fertile. *Pet.* cordate. *Seeds* convex, striated.
 328. BUPLEU'RUM. *Fl.* flosculous, fertile. *Pet.* involute. (*Involucell* petaliform.)
 348. SI'UM. *Fl.* flosculous, fertile. *Pet.* cordate. *Seeds* nearly ovate, striated.
 337. SELI'NUM. *Fl.* flosculous, fertile. *Pet.* cordate. *Seeds* depressed, striated.
 340. CRITH'MUM. *Fl.* flosculous, fertile. *Pet.* flat-tish. *Invol.* horizontal.
 346. LICUS'TICUM. *Fl.* flosculous, fertile. *Pet.* involute. *Invol.* membranous.
 347. ANGEL'ICA. *Fl.* flosculous, fertile. *Pet.* flat-tish. *Umbellets* globular.

PENTANDRIA. DIGYNIA.

349. SISON. *Fl.* flosculous, fertile. *Pet.* flattish. *Umbel* of few rays.

(*Coriandrum. Apium graveolens.*)

B. *Involucres* partial, universal none.

355. ÆTHU'SA. *Fl.* somewhat radiate, fertile. *Involucells* halved.

356. CORIAN'DRUM. *Fl.* radiate, abortive. *Fruit* nearly globular.

357. SCAN'DIX. *Fl.* radiate, abortive. *Fruit* oblong.

358. CHÆROPHYL'LUM. *Fl.* flosculous, abortive. *Involucells* 5- (—8) leaved.

353. PHELLAN'DRIUM. *Flow.* flosculous, fertile. *Fruit* crowned.

359. IMPERATO'RIA. *Fl.* flosculous, fertile. *Umb.* spreading, flat.

354. CICU'TA. *Fl.* flosculous, fertile. *Pet.* flattish.

(*Bupleurum rotundifolium. Sison inundatum. Pimpinella. Heracleum Sphondylium. Oenanthe craccata. Caulis leptophylla. Angelica sylvestris. Bunium Bulbocastanum.*)

C. *Invol.* none; neither universal, nor partial.

363. SMYR'NIUM. *Fl.* flosculous, abortive (in the centre). *Seeds* reniform, angular.

365. CARUM. *Fl.* flosculous, abortive (in the centre). *Seeds* gibbous, striated.

362. PASTINA'CA. *Fl.* flosculous, fertile. *Seeds* depressed, flat.

364. ANETHUM. *Fl.* flosculous, fertile. *Seeds* marginate, striated.

368. ÆCOPO'DIUM. *Fl.* flosculous, fertile. *Seeds* gibbous, striated. *Pet.* cordate.

367. APIUM. *Fl.* flosculous, fertile. *Seeds* minute, striated. *Pet.* inflected.

366. PIMBINEL'LA. *Fl.* flosculous, fertile. *Umbels* nodding before flowering. *Pet.* cordate.

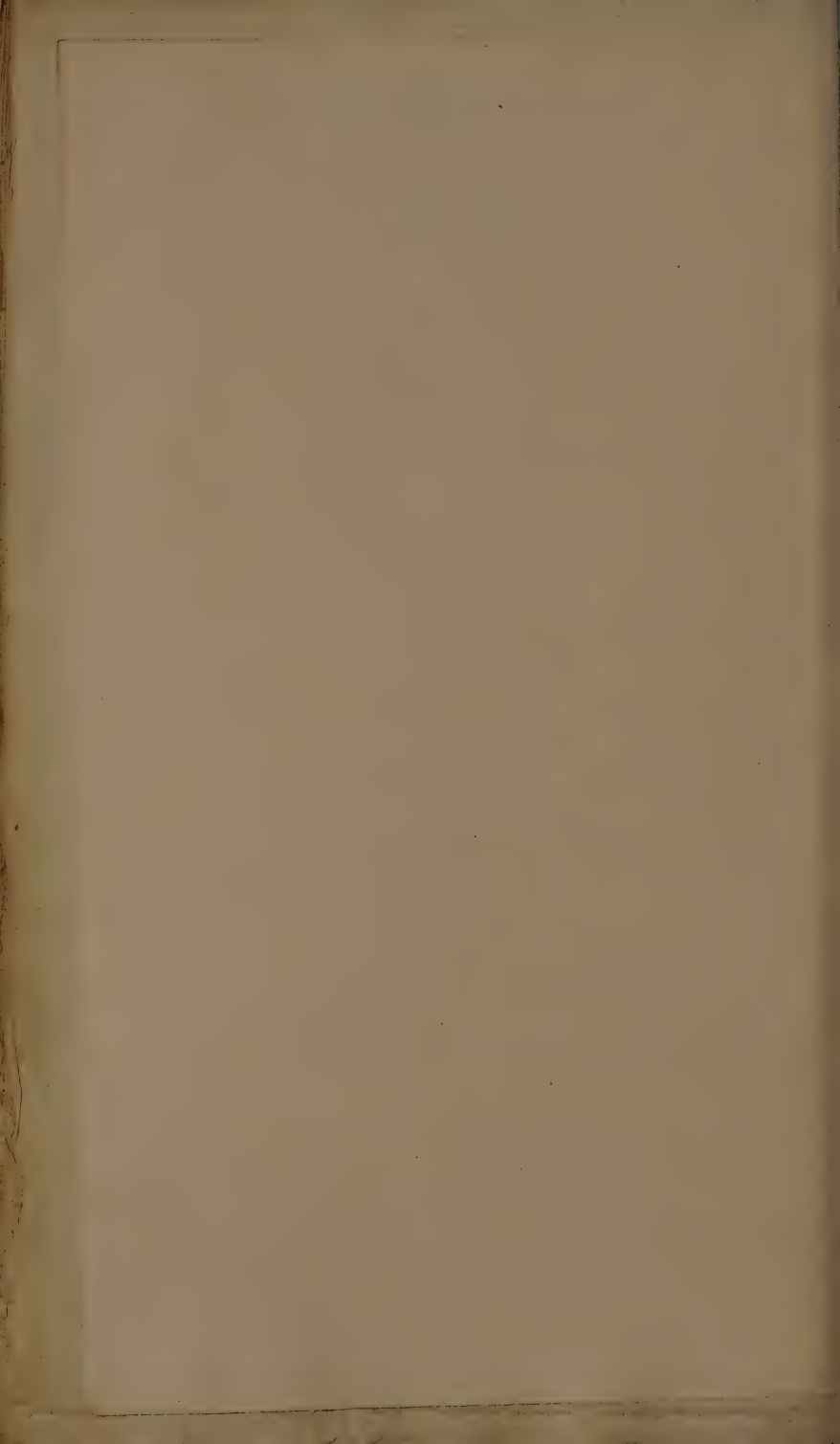
TRIGYNIA.

1. *Flowers* superior.

370. VIRUR'NUM. *Cor.* 5-cleft. *Berry* 1-seeded.

372. SAMBU'CUS. *Cor.* 5-cleft. *Berry* 3-seeded.

valley - ... low cluster ...
... what place ...



2. Flowers inferior.

374. STAPHYLE'A. Cor. 5-petalled. Caps. 2 or 3-cleft, inflated.
 380. ALSI'NE. Cor. 5-petalled. Caps. 1-celled. Cal. 5-leaved. Pet. bifid.
 378. CORRIGI'OLA. Cor. 5-petalled. Seed 1, 3-cornered. Cal. 5-parted.
 375. TAM'ARIX. Cor. 5-petalled. Caps. 1-celled. Seeds downy.

(III. *Montia fontana*. *Holosteum umbellatum*. V. *Chenopodium maritimum*. *Salsola fruticosa*, et *Kali*. X. *Arenaria rubra*, et *marina*. XXI. *Quercus*.)

TETRAGYNIA.

384. PARNAS'SIA. Cor. 5-petalled. Caps. 4-valved. Nect. 5, ciliato-glandular.
 (IV. *Ilex Aquifolium*. XXI. *Quercus*.)

PENTAGYNIA.

388. STAT'ICE. Cor. 5-parted. Seed 1, clothed with the funnel-shaped calyx.
 389. LI'NUM. Cor. 5-petalled. Caps. 10-celled, 2-seeded.
 391. DRO'SERA. Cor. 5-petalled. Caps. 1-celled, opening at the top. (*Pistils* generally 6 in the British species.)
 393. SIBBAL'DIA. Cor. 5-petalled. Seeds. 5. Cal. 10-cleft.
 (IV. *Sagina procumbens*. X. *Spergula pentandra*. *Cerastium semi-decandrum*. XVI. *Geranium*.)

HEXAGYNIA.

(*Drosera*.)

POLYGYNIA.

394. MYOSU'RUS. Cal. 5-leaved. Nect. 5, linguiform. Seeds numerous.
 (*Drosera*. XIII. *Ranunculus hederaceus*.)

Le. thick, arvense - Root brings oil red - Juice of root used to dye the face red

MONOGYNIA.

180. MYOSO'TIS. Cor. hypocrateriform, 5-cleft, emarginate; throat closed with arches (or valves). (Nuts 4; imperforated. WITH.)

Stems many, arven'sis. 1. M. Seeds smooth, leaves ovato-lanceolate, hirsute. *Field Mouse-ear.* Dry pastures. A. 5, 6. E. Bot. 480.

Plants light green 2. Seeds smooth, leaves lanceolate, smooth (calyx-teeth shorter, more obtuse).

Stems round and hairy, terminated by a long loose curled spike of blue flowers. *Water Mouse-ear.* Moist places. P. 5-7. Curt. 165.

Obs. These two species are considered by Lin. Huds. and Smith, as Var. only of *M. scorpioides*, which is thus described by Lin. "Seeds smooth, points of the leaves callous." See E. Bot. P. 480. With. ii. p. 225.

81. LITHOSPERMUM. Cor. funnel-shaped, throat pervious, naked. Cal. 5-parted. (Tube long, slender. Nuts 4, hard, imperforated. WITH.)

Flowers officinale. 1. L. Seeds smooth, corol scarcely longer than the calyx, leaves lanceolate. *Small, white.* Common Gromwell. Woods. P. 5, 6. E. Bot. 134.

purpu'ro-caru'leum. 2. L. Seeds smooth, corol much longer than the calyx. (Leaves lanceolate, barren stems procumbent. E. Bot.)

Creeping Gr. Mountainous past. P. 4, 5. E. Bot. 117.

A. white arven'se. 3. L. Seeds wrinkled; corol scarcely longer than the calyx. *Leaves broad, rather fringed.* *Loose reddish.* Corn Gromwell. Cornfields. A. 5, 6. E. Bot. 123.

182. ANCHUSA. Cor. funnel-shaped, throat closed with arches. Seeds perforated at the base.

Stems upright, hirsute, rough veins. 1. A. Peduncles axillary, capitate, with 2 opposite sessile bractes; leaves ovate, marked with lines, petioled, remote. *Flowers numerous blue.* *Leaves marked beneath?* *Leaves rough on both sides.* Evergreen Alkanet. Roadsides. P. 5-7. E. Bot. 45.

183. CYNOGLOSSUM. Cor. funnel-shaped, throat closed with valves. Seeds depressed, fixed to the style only by the inner side.

officina'le. 1. C. Stamens shorter than the corol; leaves broad, lanceolate, tomentous, sessile.

Flowers purplish. Great Hound's-tongue. Rubbish. P. 6. Curt. 249.

leaves ovate, hirsute. 2. C. Stamens shorter than the corol; leaves lanceolate, harsh, flat, distant, nearly sessile. JACQ.

upper leaves embracing the stem ovate above. WITH. C. officinale. B. Huds. 7. Lin. Shady lanes, &c. B. 5. Park. 512. 5.

shining beneath rough, stamens enclosed - Root purplish

Symphitum officinale. Root exsurgent glutinous mucilage }
 ginnous - The decoction extracts the colour from red linn }
 Leaves flavum-cakes and hasada - Roots a good potherb }

PENTANDRIA. MONOGYNIA. Pulmonaria.

47

184. PULMONARIA. Cor. funnel-shaped, throat
 pervious, Cal. prismatic, 5-cornered.

1. Perianth as long as the tube of the corol.

1. P. Root-leaves lanceolate. *Stem upright - Flowers purple*
 Bugloss Cowslips. New Forest. F. Dan. 483. *Stem leaves angustifolia - white half-*
lia. embracing stem

2. P. Root-leaves ovate-cordate, rough. (Upper officina'lis,
 leaves ovate, acute; cal. nearly as long as the

tube. E. Bot.) *Flowers white & purple or blue.*
 Spotted Lungwort. Woods. P. 4. 5. E. Bot. 118. *in clusters*

2. Calyx only half the length of the tube of the corol.

3. P. Leaves ovate, stem branched, procumbent. *maritima. Narseti*
 Sea Lungw. Sea shores. P. 7. Curt. E. Bot. 368. *Stem 2 feet.*

Obs. A magnifying-glass shews a manifest roughness upon
 many parts of it. CURTIS. *Flow. in the axils of the leaves*
purple

185. SYMPHYTUM. Cor. Limbus tubular, ven-
 tricose, throat closed with subulate rays.
 (Cor. funnel-shaped, ventricose to-
 wards the top, mouth closed by hollow
 radiate valves, which have an open hole
 on the outside near the border. Nuts 4,
 perforated. WITH.)

1. S. Leaves ovato-lanceolate, decurrent. *Root cylindrical black, stems many 3 feet +*
 Common Comfrey. Wet ditches. P. 5. Curt. 230. *officina'le. Fl. yellowish*
white or purple.

2. S. Leaves half-decurrent, the highest opposite. *tuberosa - leaves not cut.*
 Is it a Var. of the former? *Stem 2 feet.* *sum? above hairy*
 Tuberos-root. Comfrey. Fen banks. P. 7. Ger. 826. *beneath smoother & paler*
Root tuberos, white in the middle

188. BORAGE. Cor. rotate, throat closed with
 rays. (Nuts 4, not perforated. WITH.) *anthers along*
lanceolate

1. B. All the leaves alternate, calyxes spreading. *officina'lis. Root periform*
 Common Borage. Rubbish. P. 6-8. E. Bot. 36. *Flowers blue*

189. ASPERULA. Cal. of the fruit compressed, *drooping black, black*
 the sides flat, parallel, sinuate.

1. A. Calyxes, when in fruit, compressed. *procumbens.*

Trailing Catchweed. Rubbish. A. 4. 5. F. Dan. 552. *Flowers purple.*
Stem procumbent - flagelliform with small hook-like spines

190. LYCORIS. Cor. tube crooked.

1. L. Leaves lanceolate, hispid, calyxes erect when *arvensis. Root periform*
 flowering. *leaves hairy - hairs sitting on flowers blue finely*
 Wild Bugloss. Road sides. A. 6-9. Curt. 336. *veined with white*

191. ECHINUM. Cor. irregular, throat (open) nak-
 ed. Nuts 4, large, rough, imperforated.

WITH.)

leaves of the Oslip in doses of ʒi a strong but safe

Emetic -

Cowslip Root scented like anise, leaves sometimes used as a potherb - Flowers make a fine narcotic wine

48

PENTANDRIA. MONOGYNIA. Echium.

Stem spotted with purple

Stem 2^{ft} italicum. 1. E. Stem erect, hairy, spikes hirsute, corols nearly equal, stamens very long.
Fls. blind shaped
Flowers white Wall Viper-grass. Jersey. P. Ger. 802. 1.

Stem 10 In. vulgare. 2. E. Stem tuberclcd, hispid; stem-leaves lanceolate, hispid, flowers in lateral spikes. Flowers rubious
Shades red - Fl. first
red then blue. Com. Viper-gr. Sandy cornfields. B. 6-8. E. B. 181.

violaceum 3. E. Cor. as long as the stamens, tube shorter than the calyx. (Stem flaccid, rough with strong hairs; filaments and style smooth: WITH.)
Cornfields. - 8. Ger. 802. 4.

197. PRIMULA: Umbellet with an Invol. Cor. tube cylindrical, mouth open.

vulgaris. 1. P. Leaves toothed, wrinkled, scape about 1-flowered, limbus of the cor. flat. Huds. WITH.
E. Bot. P. veris. 7. Lin. P. acaulis. Curt.

Flowers pale yellow
Calyx 5 toothed
Corolla salver shaped
Leaves radical

Com. Primrose. Woods, &c. P. 4. 5. Curt. E. Bot. 4.
Obs. Lin. asserts that there is a short common pedunc. or scape, concealed under ground; but this, according to Martin, is seldom to be met with.

Flowers fascicled
Bracts at the bottom
of each peduncle
Leaves in doses of ʒi
strong but safe emetic
the calyx

Var. 2. purpurea. Scape many-flowered, cor. purple, scape, pedunc. and calyx extremely hairy. Martin 62. Perhaps this Var. might be more properly referred to the next species.

2. P. Leaves toothed, wrinkled, scape many-flowered, outermost flowers cernuous, limbus of the cor. flat. WITH. P. veris. 8. Lin. P. vulgaris. B. Huds.

Oxlip. Woods P. 4. 5. F. Dan. 454. Ger. 780. 2.

veris. 3. P. Leaves toothed, wrinkled, scape many-flowered (all the flowers cernuous, WITH.), limbus of the cor. concave. Huds. E. Bot. P. veris. a. Lin. P. officinalis. With.

Leaves contracted
in the middle

Cowslip. Meadows. P. 4. 5. Curt. 67. Ger. 780. 1.

Obs. The above three species are included under P. veris by Lin. with this char. "Leaves toothed, wrinkled." The first and third species are permanently distinct; the second forms an intermediate link between them, and the Var. purpurea may be regarded as a link between P. elatior, and veris. Moreover, a Var. of P. vulgaris has been found differing in no respect from the common sort, except in pushing up a scape sustaining several flow., and forming a more perceptible connection with P. elatior. See Flora Rustica. P. 62.

farino'sa. 4. P. Leaves crenate, smooth, limbus of the corol flat.

Bird's-eye. Meadows, &c. P. 5. Curt. E. Bot. 6.

Flowers like cowslips, but generally more numerous and red.

[Echium vulgare. Root chewed. - Used as a potherb in some hills]

Many as this trifoliate - leaves extremely bitter, used instead of hops and to destroy worms, as also for rheumatism and dropsy; they are also smoked

PENTANDRIA. MONOGYNIA. Cyclamen. 49

201. CYCLA'MEN. Cor. rotate, reflected, tube very short, throat prominent. Berry covered with a capsule. (Recept. fleshy, supporting a berry inclosed in a case. WITH.)

1. Corol retroflected. europæum.
— In Suffolk, &c. P. — Jacq. Austr. 401.

202. MENYAN'THES. Cor. hirsute. Stigma 2-cleft. Caps. 1-celled.

1. M. Leaves 3 together. (Segments of the corol entire at the margin, hirsute on the upper surface. WITH.) *trifoliate. Fl. white in clusters. Ths. on long foot stalks*
Marsh Trefoil. Moist places. P. 6. 7. Curt. 240.
2. M. Leaves cordate, very entire, segments of the corol ciliate. *nymphoides.*
Fringed Bogbean. Ditches. P. 7. 8. E. Bot. 217.

203. HOTTO'NIA. Cor. hypocrateriform. Stam. standing on the margin of the tube of the corol. Caps. 1-celled. *Stalks long creeping then erect*

1. H. Peduncles verticillate; many-flowered. palustris.
Water Violet. Ponds. P. 6. 7. Curt. E. Bot. 364. *Flowers white.*

205. LYSIMA'CHIA. Cor. rotate. Caps. globular, mucronate, (5 or) 10-valved.

1. Peduncles many-flowered.

1. L. Panicked, racemes terminal (and axillary). vulgariis. *Stem 4 or 5 ft.*
Yellow Loose-strife. Shady marshes. P. 6. 7. Curt. *Flowers yellow*
2. L. Racemes lateral, peduncled. thyrsiflora.
Tufted Loose-strife. Marshes. P. 6. E. Bot. 176. *ra.*
Stem erect. Flowers yellow, on long foot stalks

2. Peduncles 1-flowered.

3. L. Leaves ovate, acute, flowers solitary, stem nem'orum.
creeping. *Flowers yellow on lateral foot stalks*
Yellow Pimpernell. Woods. P. 5. 6. Curt. 328.
4. L. Leaves somewhat cordate, flowers solitary, nummular.
stem creeping. *Flowers from the axils of the leaves, yellow.*
Moneywort. Moist meadows, &c. P. 6. Curt. 149.

206. ANAGAL'IS. Cor. rotate. Caps. cut round.

1. A. Leaves undivided (ovato-lanceolate), stem arven'sis.
procumbent.

Var. 1. Corol scarlet. *from the axils of the leaves.*

Male Pimpernell. Cornfields. A. 5—8. Curt. Ger.

Var. 2. Corol blue. A. cerulea Gmelin. *Stem rather erect.*

Female Pimpernell. Cornfields. A. 5. 8. Blackw. *Leaves opposite (lvs.) of the corolla reflex*

Scarlet Pimpernell - Collected before the flowers appear and given in powder 3 or 4 times a day given in Epilepsy. Flowers open only at the hottest time of day or only when fine weather is coming on

Verbascum - 2. Small also, as abundantly in mucilage and other intoxication to fish, yet is only mildly sedative and perfectly safe for internal use

50 PENTANDRIA. MONOGYNIA. Anagallis.

Corolla pale purple streaked.
tenella. 2. A. Leaves ovate, rather acute, stem creeping. *Ly-simachia tenella*. Huds.
 Bog Pimpernell. Boggy places. P. 6. 8. Curt. 187.
 212. AZA'LEA. Cor. campanulate. Stam. inserted in the receptacle. Caps. (2—) 5-celled.

indica 5. *procumbens*. 1. A. Branches diffuse, procumbent.
 Trailing Rose-bay. Highland M. P. 6. F. Dan. 9.
 215. CONVOL'VULUS. Cor. campanulate, plaited.
 Stigm. 2. Caps. 2-celled, cells 2-seeded.
 1. Stem twining.

arvensis. 1. C. Leaves sagittate, on both sides acute, peduncles generally 1-flowered.
Corolla reddish-white
peduncles 4 sided 1-flowered
Root creeping, stem angular
 Small Bindweed. Cornfields. P. 6. 7. Curt.
 Var. 2. Leaves sagittato-linear: smaller. RAY syn.
 276. Pluk. 24. 3.
 — 3. Corol very small, divided almost to the base. DILL. in RAY syn. 276.
 2. C. Leaves sagittate, truncated behind, peduncle 4-cornered, 1-flowered. (2 bractes near the cal.)
Stem 2 or 3 ft. scirpium.
Corolla white on long
triangular footstalks
 Great Bindweed. Hedges. P. 7—8. Curt. E. Bot. 313.
 2. Stem not twining.

Root creeping Soldanell'la. 3. C. Leaves reniform, peduncles 1-flowered.
Corolla red-flush white
Stamens yellow - stem short prostrate
 Sea Bindweed. Sea shore. P. 7. E. Bot. 314.
 217. POLEMO'NIUM. Cor. 5-parted, the bottom closed with staminiferous valves. Stig. 3-cleft. Caps. 3-celled, superior.

Stem 2 feet.
ceruleum. 1. P. Leaves pinnate, flowers erect, calyxes longer than the tube of the corol.
 Com. Jacob's-ladder. Near Buxton. P. 6. E. Bot. 14.

245. VERBAS'CUM. Cor. rotate, rather unequal.
 Caps 4-celled, 2-valved. *filaments yellow*
stamens
Stem 36 feet Thap'sus. 1. V. Leaves decurrent, on both sides tomentous, stem simple. *leaves not cut*
leaves large broad, white
Corolla yellow white
Root herbiform +
 Great White Mullein. Dry banks. B. 7. Woodv. 125.
 Var. 2. Thapso-nigrum. Leaves ovato-oblong, lower ones petioled, middle ones sessile, upper ones decurrent, stem branched, flow. several together, sessile. Mr. ROBSON.

leaves woolly white Thapsoi'd. 2. V. Leaves decurrent, stem branched. *Stem 3 feet*
leaves white - des.
leaves mostly 4 feet Lychnit'is. 3. V. Leaves oblongo-cuneiform. *woolly*
flowers golden yellow
anthers bright red
 Hoary Mullein. Chalky pastures, &c. 7. E. Bot. 58.
 Var. 2. Powdery. Plant with a meal-like down.

Verbascum Thapso - Externally used, it is mollificent, given also to cows, that are consumptive; a decoction 2oz to wash given daily is useful in Diarrhoea, or as a clyster in tenesmus the down of the leaves is also used for binding the whole but given internally is said to intoxicate fish, so that they might be taken by hand.

Hyoscyamus - Root-leaves 2-seeds, reputed, poisonous but the seeds may be eaten with impunity; the expressed juice is added to opium to prevent coction; the smoke removes toothache - The effects of the white are milder than the black.

PENTANDRIA, MONOGYNIA. *Verbascum* the 51 black.

4. V. Leaves cordato-oblong, petioled. *Stem nigrum. Purple 5 feet*
Black Mullein. Road sides. P. 7-9. E. Bot. 59. *Fl. yellow, w. black an.*
5. V. Root-leaves somewhat lyre-shaped; stem-*virgatum. Corolla large*
leaves sessile, stem branching, peduncles seve-*stem 3 feet branched at*
ral together, sessile. STOKES. *bottom, radical leaves wrinkled*
— Near Worcester. — Lob. ic. 564. *and yellow w. purple tube*
6. V. Leaves embracing the stem, oblong, smooth, *Blatta'ria.*
peduncles solitary (1-flowered). *corolla large yellow with*
Yellow Moth M. Grav. soil. A. 6. 7. E. Bot. 393. *fine tube stem 4 feet*
255. CHIRO'NIA. Cor. rotate (funnel-shaped).
Pist. declining. Stam. sitting on the
tube of the cor. Anth. becoming spiral.
Pericarp 2-celled.

1. C: Stem herbaceous, dichotomously paniced, *Centauri-*
leaves ovato-lanceolate; cal. shorter than the *um.*
tube of the corol. E. Bot. WITH. *Gentiana stem 6 to 12 inches*
Centaurium. Lin. Flowers pale red
Less Centaury. Pastures, &c. A. 6-8. Curt. 247.
2. C. Corol funnel-shaped, tube long; stem undi-
vided. WITH. (Stem herbaceous, much *pulchell'ia.*
branched; leaves ovate; calyx-teeth subu-
late, above half as long as the tube; flow. pe-
duncled. E. Bot. G. Centaurium B. Lin.
Dwarf-branched C. Gorlestone. 8. 9. E. Bot. 458.

247. HYOSCY'AMUS. Cor. funnel-shaped, ob-
tuse. Stam. inclined. Caps. with a lid, 2-
celled. *corol unequally 5-*
lobed flowers solitary
mostly facing one way, tube white purple in the
middle, limb pale yellow veined with purple

1. H. Leaves embracing the stem, sinuate, flow-
ers sessile. *flowers large, brown, and purple*
Common Henbane. Road sides. A. 6. Ger. 353. 1.

246. DATU'RA. Cor. funnel-shaped, plaited.
Cal. tubular, angular, deciduous. Caps.
4-valved. *ovate, thorny*

1. D. Pericarp thorny, erect, ovate, leaves ovate, *Stramo'ni-*
smooth. *flowers large white* *um. spreading leaves*
Thorn Apple. On rubbish. A. 7. F. Dan. 436. *from the fork flowers a tree*

295. VIN'CA. Cor. contorted. Follicles 2, erect.
Seeds naked. *corol salver-shaped solitary*

1. V. Stems procumbent, leaves lanceolato-ovate, *mi'nor, stem woody.*
flowers peduncled. *flowers large, pale pink white*
Less Periwinkle. Hedges. P. 5. Curt. 172.
2. V. Stems erect, leaves ovate, flowers pedun-
clad. *stem woody corolla like the former.*
Greater Periwinkle. Hedges. P. 5. Curt. 222. *leaves smooth*

to stem: leaves given internally being in delirium, taking rubbing
d. riptum? of the skin; then effects are counteracted by sections
this said the expressed juice of leaves mixed w. dose of 2 to 6 gr. & may
be used in convulsions & the lighter temp. Ointment made from them and
used internally produce the same effect as leaves. Root & flower part of them
smoked is antispasmodic

Stigma Belladonna leaves externally applied with decoction
to tumors of the breast, even if cancerous - applied to the eye
it causes a dilatation of the pupil, and affects it some time so
it will not contract even in the strongest light - A Poultice of the
flowers in loose branches, hursh, with 2 greenest
251. SOLANUM. Cor. rotate. Anth. somewhat
not at the base of each united, a double pore at the top of each.
segment - Stamina yellow Berry 2-celled.

Stem, woody Dulcamara - 1. S. Stem unarmed, shrubby, flexuose, upper leaves
6 ft or more in length hastate, racemes cymose. Root woody, thick, late
Bitter-sweet. Moist hedges. P. 6. 7. Curtis.

Stem 1 ft fl. white ni'grum. 2. S. Stem unarmed, herbaceous, leaves ovate, tooth-
ed, angular, racemes 2-rowed, nodding.

leaves black flowers small Common Nightshade. On rubbish. A. 6-10. Curt.
leaves green - leaves app? externally white inflor? - 1 or 2 grains infused
in boiling water and taken at 249. AT'ROPA. Cor. campanulate. Stam. distant.
best time measure respiration 4 mg? not Berry globular, 2-celled. *Stem 2 ft fl.*

Stem 3 or 4 ft Belladonna - 1. A. Stem herbaceous, leaves ovate, entire. *in pairs*
flow. purple. na. Deadly Nightshade. Hedges. P. 6-8. Curt. 347.
in this white. leaves black & shining

222. SAM'OLUS. Cor. hypocrateriform. Stam.
defended by the scales of the corol. Caps.
1-celled, inferior.

Valeran' di. 1. SAMOLES.

Pimpernell Brookweed. Marshes. P. 6. 7. Curt. 268.

218. CAMPAN'ULA. Cor. campanulate, the bottom
closed by staminiferous valves. Stig. 3-cleft.
Caps. inferior, opening with (3) lateral
pores. *not in S. Curt*

1. Leaves smoother (narrower. M.).

Corolla blue rotundifo' - 1. C. Root-leaves reniform, stem leaves linear.
Stem 2 or 3 ft. India. Round-leaved Bell-flower. Com. P. 8-10. Curt.

with leaves deeply crenated Var. 2. Single-flowered, root-leaves cordate, stem-
leaves lanceolate. F. Dan. 855.

leaves milky, upper, pat'ula. - 2. C. Leaves stiff and straight, root-leaves lanceola-
Corolla blue with 3 to-oval (ovate), panicle patulous. *Stem angular*

reddish lines Field Bell-flower. Road sides. B. 7. 8. E. Bot. 42.

Stem 2 or 3 ft Rapun'cu- 3. C. Leaves undulated, root-leaves lanceolato-oval,
angular lus. panicle compact.

Corolla blue or white 216. Rambon Bell-fl. Hedge banks. B. 7. 8. E. Bot. 283.

Plant milky latifolia. 4. C. Leaves ovato-lanceolate, stem very simple,
Stem 1 ft. Flowers very large cylindrical, flowers solitary, peduncled, fruit
flowers pale red cernuous.

Giant Throatwort. Woods. P. 7. 8. E. Bot. 302.

Corolla blue Tracheli- 5. C. Stem angular, leaves petioled, calyxes ciliate,
Stem 2 feet um, peduncles 3-cleft. *leaves rough, lobes, reflex*

leaves heart-shaped rough Canterbury Bells. Hedges. P. 7. 8. E. Bot. 12.

glomerata. 6. C. Stem angular, simple, flowers sessile, forming
a terminating head.

Corolla blue, reddish, or white, resting upon short
broad leaves. - Corolla vivid or hairy inside - Root woody

Stem 2 or 3 ft. Leaves in pairs highly esteemed as a cath-
artic and alterative for dropsy & leucorrhoea - 3j of the

leaves with seeds is said to interfere for some

time

PENTANDRIA. MONOGYNIA. Campanula. 53

Clustered Bell-fl. Chalky past. P. 7. 8. E. Bot. 90.

3. Caps. covered by the reflected segm. of the cal.
WITH.

7. C. Leaves cordate, 5-lobed, petioled; smooth, hederacea.
stem flaccid. *Stem 4 or 5 In. reddish - fl. blue*
Ivy-leaved Bell-fl. Shady pl. P. 5—8. E. Bot. 73. *Stem weak & trailing*
mailed

4. Capsules prism-shaped. WITH.

8. C. Stem somewhat branched at the base, leaves *hybrida*
oblong, crenate, undulated, longer than the *stem angular rough*
corol; caps. prismatic. *flowers purple, upland.*
Corn Bell-fl. Chalky cornfields. A. 6. 7. E. B. 375.

220. PHYTEU'MA. Cor. rotate, 5-parted; seg-
ments linear. Stigma 2 or 3-cleft. Caps.
2 or 3-celled, inferior.

1. P. Head roundish, leaves serrated, root-leaves orbicula'ris
cordate. (bractes lanceolato-linear, ciliate). *Stem 1 foot*
Round-head. Rampion. Chalky p. P. 7. 8. E. B. 142. *Corolla purple*

233. LONICE'RA. Cor. 1-petalled, irregular
(tubular). Berry 2-celled, many-seeded,
inferior.

1. L. Heads ovate, imbricated, terminal, leaves Pericly'me-
distinct. *calyx 5 toothed. Corolla red or carmine.*
Com. Honeysuckle. Hedges. S. 5. 6. Curt. *Stem with some red*

2. L. Peduncles 2-flowered, berries distinct, leaves Xylos'te-
very entire, pubescent. *a low shrub* um. *bushy*

Upright Honeysuckle. Woods. S. 5. F. Dan. 808.

205. RHAM'NUS. Cal. tubular, scales defending
the stamens. Cor. o. A Berry. (Cal. tubu-
lar. Pet. 5, opposite to the stam. Berry
few-seeded. E. Bot.) *See Page 68*

1. Thorny.

1. R. Thorns terminating; flowers 4-cleft, dioi-catharti-
cous, leaves ovate; stem erect. (Seeds 4.) *fl. pale. cus. yellow green*
Purging Buckthorn. Woods. S. 4. 5. F. Dan. 850. *Berry black*
leaves in winter, petioled, ribbed, when young downy

2. Unarmed.

2. R. Flow. herm., monogynous, leaves very en-
tire. (Seeds 2.) *Corolla white - berries dark la. wood*
Alder Buckthorn. Woods. S. 4. 5. E. Bot. 250. *Stamens purple*
leaves much branched *See page 60*

271. EUON'YMUS. Cor. 5-petalled. Caps. 5-cor-
nered, 5-celled, 5-valved, coloured. Seed
calyptred. *at the celly*

and dry twigs infused in spirit of water for half an hour
and boiled for 15 minutes - Dose two supples more & evening
used in acute rheumatism inflam' diseases, fevers, suppura-
the locked asthma, leucury, leucorrhoea

europaeus. 1. E. Flowers mostly 4-cleft (4-petalled), leaves

Flowers greenish white (nearly) sessile, opposite lanceolate serrate
 Com. Spindle-tree. Woods. S. 5. 6. E. Bot. 362.
 Branches used for
 281. R. BES. Pet. 5, and stamens inserted in the
 calyx. Style bifid. Berry inferior, many-
 seeded.

1. Currants. Unarmed.
 Leaves bluish 5-lobed, slightly downy, bracted ovate, very short
 rubrum. 1. R. Racemes smooth, pendulous, flow. flattish;
 Red Currants. Woods. S. 5. F. Dan. 967.
 Berry red, when cultivated sometimes white
 alpinum. 2. R. Racemes erect, bractes longer than the flower.
 (Sometimes dioicous.) Leaves shining beneath
 a small shrub. Sweet Mountain Currants. Hedges. S. 5. F. Dan. 968.
 Stem upright unarmed.
 spicatum. 3. R. Spikes erect, petals oblong, bractes shorter
 than the flowers. ROBSON. Lin. Tr. V. iii.
 — Near Richmond, Yorks. S. 4. 5. Lin. Tr. iii. 21.

niligrum. 4. R. Racemes hairy, flowers oblong. bell shape
 leaves with gland. Black Currants. Wet hedges. S. 5. F. Dan. 556.
 dots beneath; racemes with hairy bracted stalks. Near Richmond
 2. Gooseberries. Prickly.

5. Branches prickly, petioles ciliate with hairs,
 berries hirsute. (Fl. scales 2 or 3, opposite,
 embracing the peduncle. STOKES.)
 Rough Gooseberry. Hedges. S. 4. Walc.

Uva-cris'-6. Branches prickly, berries smooth, peduncles with
 a 1-leaved (3-parted) bracte.
 Smooth Gooseberry. Hedges. S. 4. 5. Ger. 1324.
 Obs. Seeds from the same plant produce rough and smooth
 gooseberries, ROBSON.

leaves 5 angular lobed 283. HED'ERA. Pet. 5, oblong. Berry 5-seeded,
 surrounded by the calyx.

Helix. 1. H. Leaves ovate and lobed.
 Common Ivy. Hedges, Woods, &c. S. 10. Curtis.
 290. ILLECEBRUM. Cal. 5-leaved, cartilaginous.
 Cor. o. Stig. simple. Caps. 5-valved, 1-
 seeded.

verticilla'-1. Fl. verticillate, naked, stems procumbent.
 Whorled Knot-grass. Marshes. P. 7. F. Dan. 335.
 291. GLAUX. Cal. 1-leaved. Cor. o. Caps. 1-
 celled, 5-valved, 5-seeded.

marilima. 1. GLAUX.
 Corolla purple Sea Milkwort. Salt marshes. P. 6. 7. E. Bot. 13.

Hedera helix - Root used to whet knives - leaves rancid
 used in the atrophy of children, and as a cover to efface
 instead of a plaster. - Berries slightly acid, emetic and
 purgative; green stringy smelling, attractive of fish -

Ribes Glosularia - Berry a whole some fruit with some
 & draped; seeds have been used for pepper; juice of the fruit
 with sugar makes a sparkling drink like Champagne or
 good wine.

PENTANDRIA. MONOGYNIA. Thesium. 55

Fig. 3 - Early period of Boonberry
 292. THE'SIUM. Cal. 1-leaved, stamens insert-
 ed in it. Seed 1, inferior.

1. T. Panicle leafy, leaves linear. (Spike branch- linophyll'-
 ed, bractes ternate, leaves lineari-lanceolate, lum.
 cal. tube very short. E. Bot.)

Bastard Toad-flax. Heaths. P. 6. 7. E. Bot. 247. Corolla white.

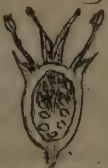


Fig. 1 *Ribes Glos* - Berry curved with the persistent
 calyx cut longitudinally. Placentaria
 two, lateral and opposite.

DIGYNIA.

Fig. 2 The same cut transversely, Placentaria
 lateral.

321. SWER'TIA. Cor. rotate. Nectariferous
 pores at the base of the segments of the
 corol. Caps. 1-celled, 2-valved.



1. S. Corol 5-cleft, root-leaves oval. *Trans blue & peren'nis.* *Stem erect*
Marsh Gentian. Mountains. P. 8. Ger. 433. 5. *Stigma without*
dark white; stem 1 foot *Stigma without*
 322. GENTIA'NA. Cor. 1-petalled. Caps. 2-
 valved, 1-celled. Recept. 2, longitudinal.

1. G. Cor. 5-cleft, campanulate, peduncled, leaves *Pneumo- stem erect*
 linear. (Anth. syngenesious.) *Corolla blue* *nan'the. 2 feet -*
Calathian Violet. Heaths. P. 8. E. Bot. 20.

2. G. Corols 5-cleft, funnel-shaped, branches 1- *niva'lis.*
 flowered, alternate (calyx with 5 keeled an-
 gles).

— On Ben Lawers. A. F. Dan. 17.

3. G. Corols 5-cleft, hypocateriform, throat beard- *Amarel'la. stem 1 foot*
 ed. (Calyx-segments equal.) *Corolla blue* *inter white*
Autumnal Gentian. Chalky p. A. 8. 9. E. Bot. 236. *leaves oval 3 ribbed*
root proform

4. G. Corols 4- (or 5) cleft, throat bearded (2 out- *campe' tris.*
 er calyx-segments larger). *stem erect 2 or 3 inches high*
Field Gentian. Mountains. A. 8. 9. E. Bot. 237.

5. G. Corol campanulate, (4-cleft) not bearded, *colli'na.*
 pistil woolly, stigmas 3, leaves lanceolato-
 linear, hairy. (Stam 4—5? short.) WITH.
 — Aston Down, Isle of Wight. 5. With. pl. 11.

6. Cor. 5-cleft, funnel-shaped, stem dichotomous, *Centau'ri. flowers rose*
 pist. simple. See *Chironia Centaurium.* P. 51. *um. colored in brown*

7. G. Cor. 4-cleft, beardless, stem dichotomous, *filifor' mis.* *stem*
 filiform. See *Exacum filiforme.* Page 35. *fr. slender*
flowers yellow or long pedicels

309. CHENOPO'DIUM. Cal. 5-leaved (5-cleft)
 5-cornered (5-ribbed). Cor. o. Seed 1,
 lenticular, superior (horizontal, covered
 by the converging calyx, CURT.).



Ribes glosularia
 Fig. 3 Seed of the berry cut longitudinally
 and magnified, with the umbilical cord as
 it is above the gelatinous pulp, surrounding the seeds
 Embryo very small at the tip

- (*Bonus Henri'cus* - Herb. Exaration eaten as a pot herb.
Young shoot, boiled and boiled, eat like asparagus)
1. Leaves angular.
Stems flowers and leaves procreant
- Stalks 2f. *Bonus-Henri'cus*. 1. C. Leaves triangulari-sagittate, very entire, spikes compound, leafless, axillary.
Corolla green & white. Com. English Mercury. On rubbish. P. 5. Curt. 184.
- ur'bicum. 2. C. Leaves triangular, somewhat toothed, racemes crowded, very long and straight, applied close to the stem.
Stem angular
Racemes axillary.
Flowers greenish Upright Goosefoot. Dunghills. A. 8; 9. Pet. 8. 8.
- ru'brum. 3. C. Leaves cordato-triangular, rather obtuse, toothed, racemes erect, compound, rather leafy, shorter than the stem.
Leaves thick shining
deeply toothed
Racemes spreading reddish - Red Goosefoot. Rubbish. A. 8. Curtis.
- Obs. This plant varies extremely according to the situation in which it is found, on dunghills the stem is erect, and frequently 2 or 3 feet in height; on poor soil the whole plant is procumbent and in a dwarfish state. It also varies in colour, being either of a pale green, or of a fine purple. It is distinguished with certainty from *C. urbicum* by the size of the seeds, which in the *rubrum* are scarcely larger than the grains of writing sand, in the *urbicum* are nearly the size of a rape-seed. See CURTIS.
- al'bum. 4. C. Leaves rhomboideo-triangular, eroded, entire behind, the highest oblong, racemes erect.
Stem erect 3 feet.
branched herb green
flowers in terminal
bunches, composed of
alternate, thick spikes.
vir'ide. 5. C. Leaves rhomboid, dentato-sinuated, racemes branched, rather leafy. C. album β. Huds. A
Variety of the former?
Flowers in long, slender
naked, divided, spikes Green Goosefoot. Gardens. A. 8. Curt. 103.
- hy'bridum. 6. C. Leaves cordate, angular, acuminate, racemes branched, naked.
Maple-leaved Goosefoot. Rubbish. A. 8. Curt. 248.
- glau'cum. 7. C. Leaves ovato-oblong, repand, racemes naked, simple, clustered.
Stem procumbent
Oak-leaved Goosefoot. Rubbish. A. 8. Pet. 8. 1.
- mura'le. 8. C. Leaves ovate, shining, toothed, acute; racemes branched, naked.
Herb dark green shining
toothed leaves frang-ovate Wall Goosefoot. Rubbish. A. 7. 8. Pet. 8. 5.
2. Leaves entire.
- Vulva'ria. 9. C. Leaves very entire, rhomboideo-ovate, flowers axillary, conglomerate. (C. *olidum*. With.)
Stinking Goosefoot. Road sides, &c. A. 8. Curtis.
- Stem procumbent
Flowers in small roundish bunches.

PENTANDRIA. DIGYNIA. Chenopodium.

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10. C. Leaves very entire, ovate; stem decumbent; 'polysper' - *Stem dark green*
cymes dichotomous, leafless, axillary. (Stem num. *Seeds reddish*
erect; calyx of the fruit open. CURT.) *Flowers very numerous*
Upright Blite. Dunghills, &c. A. 7. 8. Curtis. *small in forked branches*
11. C. Leaves subulate, semi-cylindrical. *maritimum.*
Sea Goosefoot. Salt marshes. A. 8. F. Dan. 489. *a small whitish plant*
310. BE'TA. Cal. 5-leaved (5-cleft). Cor. o. *leaves fleshy and an*
Seed reniform, within the substance of *excellent potherb*
the base of the calyx.
1. B. Flowers in pairs. (Cal. entire, stem procum- *maritima.*
bent. E. Bot.) *leaves leaves triangular leaves solitary on a stem*
Sea Beet. Sea coast. P. 7-9. E. Bot. 285. *Root black, internally white*
311. SAL'SOLA. Cal. 5-leaved (5-cleft). Cor. o. *Stems many much*
Caps. 1-seeded, cochleate. (Seed 1, in- *branched flowers racemose*
ferior, coated by the calyx.)
1. S. Herbaceous, decumbent, leaves subulate, *Ka'li.*
thorny, rough, calyxes marginate, axillary.
Prickly Glasswort. Sea shore. A. 7. 8. F. Dan. 418. *Flowers greenish*
2. S. Shrubby, erect, leaves filiform, rather obtuse. *fruticosa.*
Shrub Glasswort. Sea shore. S. 8. Lob. adv. 163. 3.
308. HERNIA'RIA. Cal. 5-parted. Cor. o. Stam.
5, imperfect. Caps. 1-seeded.
1. H. Plant smooth. *Stems 4 or 5 inches* *glabra.* *Flowers minute*
Smooth Rupturewort. Gray soil. P. 7. 8. E. B. 206. *yellow in clusters along the*
2. H. Plant hirsute. (A variety of the former?) *hirsuta.* *Stalks.*
Hairy Rupturewort. Grav. soil. A. 7. 8. Pet. 10. 10. *Stems and leaves simple*
316. UL'MUS. Cal. 5-cleft. Cor. o. Berry juice-
less, compressed, membranous.
- U. Leaves doubly-serrated, unequal at the base. *campest'ris.* - *Back more*
(Flowers almost sessile, crowded.) *with flowers to make heads in some*
Common Elm. Hedges. T. 4. Ger. 1480. 1. F. D. 632. *of scarcity, young leaves*
Var. 2. Narrow-leaved Elm. *β. Huds.* Less, *eaten greedily by silkworms*
leaves narrow, rough. RAY syn. 469. 2. *decortication of inner bark*
3. Smooth-leaved Elm. *δ. Huds.* Leaf smooth. *discrete*
RAY syn. 469. 4.
2. U. Leaves doubly-serrated, unequal at the base, *montana.*
ovato-acuminate, smooth. (Flowers on long *Back of the large smooth*
peduncles.) WITH. U. campestris. *γ. Huds.* *coming up easily - flowers*
Broad-l. Elm. Shady lanes. T. 4. 5. Ger. 1481. 3. *larger than those of With.*
324. ERYN'GIUM. Flowers capitate. Recept. *elm appearing on young*
chaffy.

as the "Stone of Cornish" Elm - leaves much resembling those
of the wood formerly used for magical purposes, from which
has been called witch hazel - Wood not so coherent as the
common Elm - formerly used by poor persons for long bones

Heracleum Phorogonium - Leaves and seeds brewed form a cord
of ale in Poland & Lithuania; stems peeled to get rid of the rind
skin are eaten in Russia - When dried sugar exudes from them, but only
yld in bott of Herb **PENTANDRIA. DIGYNIA. Eryngium.**

Root very long marit'i. 1. E. Root-leaves roundish, plaited, thorny; heads
Corolla small mum. peduncled, chaff 3-pointed.
whitish. Sea Holly. Sea shore. P. 7. 8. F. Dan. 875.

campes'tre 2. E. Root-leaves embracing the stem, pinnate, lan-
ceolate.
This Plant and the former Field Eryngo. Near Darenty. P. 7. 8. E. Bot. 57.
of a bluish green: 325. **HYDROCOTYLE.** Umbel simple. Invol. (2
or) 4-leaved. Pet. entire. Seeds semi-or-
bicular, compressed.

Stem creeping vulgaris. 1. H. Leaves peltate, umbels 5-flowered.
jointed, umbels of 5 fl. Marsh Pennywort. Marshy gr. P. 5. 6. Ger. 529. 5.
Small and reddish white. 326. **SANIC'ULA.** Umb. crowded, somewhat
capitate. Fruit rough. Flow. of the disk
abortive.

europ'a'a. 1. S. Root-leaves simple, florets all sessile.
Common Sanicle. Woods. P. 5. 6. E. Bot. 98.
Stem erect, naked 345. **HERACLE'UM.** Fruit elliptical, emarginate,
umbel rays unequal often compressed, striated, marginate. Cor. ir-
branched flowers whitish. regular, inflexo-emarginate. Invol. cadu-
cous.

Root fusiform Sphondyli-1. H. Leaflets pinnatifid, smooth, flowers uniform.
Stem 4 feet high um. Cow Parsnep. Hedges, &c. B. 7. Ger. 1009.
branchy - umbels flat Var. 2. Narrow-leaved. Leaflets lanceolate. St.
Pet. 24. 2.

352. **OENAN'THE.** Florets difform; sessile in the
disk, barren. Fruit crowned with the cal-
yx and pistils.

Root stolonif. fistulo'sa. 1. Oe. Stoloniferous, stem-leaves pinnate, filiform,
fistulous. (Florets of the ray abortive; Invol.
seen 2 root-fistulous universal sometimes o.)
Root leaves sunk Water Dropwort. Ditch. P. 7. E. Bot. 363. Ger. 1060.

Root tuberos, croca'ta. 2. Oe. All the leaf. many-cleft, obtuse, nearly equal.
Invol. blunt, crowded Hemlock Dropwort. Ditches. P. 6. 7. Woodv. 267.

Root tuberos, pimpinel-3. Oe. Root-leaflets cuneiform, cloven, stem-leaflets
linear shorter lor'des. entire, very long, simple, linear.
fusiform Parsley Dropw. Salt marshes. P. 7. 8. E. Bot. 347.

Root tuberos, peucedani-4. Oe. Leaflets all linear, universal invol. none,
folia. knobs of the root sessile, elliptical. E. Bot.
Pedicels crowded **PODLICH.** Oe. fistulosa Var. 2. peucedanifolia.
With.

Umbels many rayed Sulphur-wort Dropw. Ditches, &c. 6. E. Bot. 348.
Umbels flat; center dark 326. **ECHINOP'HORA.** Lateral florets male, cen-
ray, white. tral one hermaphrodite. Seed 1, immersed in
the involucret.

Benarthe crocata - Juice of the root or an infusion of the leaves
in small doses officac. in obstinate cutan diseases - In England,
benarthe folia letarus - Herb applied as a poultice to ulcers
in the cleft of the roof of the nose.

1. E. Leaflets subulate, thorny, very entire. *spino'sa* ?
Sea Parsnep. Sea coast. P. 7. *Ger.* 533. 2. *Root-fusiform fleshy*
Obs. This plant is no longer to be found at Roosbeck in *leaves opposite*
 Low Furness, the habit, mentioned by Ray, and it is
 suspected to have been only the *Salsola Kali*. See With.
331. *CAULICALIS.* Cor. radiate, florets of the
 disk male. *Pet.* inflexo-emarginate. Fruit
 rough with bristles. *Invol.* leaflets en-
 tire.
1. C. Universal invol. scarcely any, umbel cloven, *leptophyl-*
la.
 — Cor. fields. A. 7. *Jacq. hort.* 195.
2. C. Umbels 3-cleft, leafless, umbellets 3-seeded, *daucoides.* *Stems much bran-*
3-leaved. *red leaves triplicately pinnate ribs prickly beneath*
Bastard Parsley. Chalky cornfi. A. 5. 6. E. B. 197.
3. C. Umbel universal 3-cleft, partial 5-seeded; *latifolia.* *Stems 3 feet high*
invol. membranous) leaves pinnate, serrated. *Flowers reddish*
 (Seeds ovate, prickly.)
Broad-l. Hen'sfoot. Cornfields. A. 7. E. Bot. 198.
4. C. *Invol.* 1-leaved or 0; seeds ovate, styles re- *arvensis.*
 flected, leaves decomposed, terminating leaf-
 let linear-lanceolate, stem much branched.
- AIRON. Huds.*
Corn Hen'sf. Chalky cornfi. A. 7. 8. *Jacq. A.* iii. 16.
5. C. *Invol.* many-leaved, seeds ovate, styles re- *Anthris-*
 flected, leaves decomposed, the terminating *cus.*
 leaflet linear-lanceolate. *AIRON.* *Tordyli-*
um Anthriscus. Lin.
Hedge Hen'sfoot. Hedges. B. 8. F. Dan. 919.
6. C. Seeds ovate, acuminate, with short hooked *scandici-*
 prickles on the back. *WITH.* *Scandix An-* *na.*
thriscus. Lin. Huds. &c.
Road sides. A. 5. 6. *Curt. Mart.* 75.
7. C. Umbels lateral, simple, almost sessile, seeds *nodo'sa.*
 ovate, outer ones bristly; inner ones rough.
WITH. *Tordylium nodosum.* Lin.
Knotted Hen'sfoot. Cornfields. A. 6. E. Bot. 199.
33. *DAUCUS.* Cor. somewhat radiate, all the
 florets hermaph. Fruit hispid with hairs.
1. D. Seeds hispid, petioles nerved underneath. *Caro'ta.* — *Seeds divaricate*
 (Angles of the seeds 4, distant, hispid; um- *carminative and their*
 bel concave when in seed.) *super. used in gravelly comp.*
Com. Wild Carrot. Hedge sides. B. 6—8. *Mart.* 82.
2. D. Angles of the seeds 4 large, and 3 small, um- *mariti-* *Leaves dark glossy*
 bels convex when in fruit. *WITH.* *mus.* *green. Lining flowers*
Sea-coast Carrot. Coast of Cornwall. — 7. 8. *all white*

Daucus com. flavus. — *Roots, deep yellow or white*

— *also rubens.* — *Red carrots Root, large, pinkish red*

Roots of both these cultivated varieties are saccharine, but have to
an end least — When horses are kept on them for some time they induce
maturity — In hounds they abate the color of food & cause it to

Succedanea officinale. — Root periform, foetid, acid bitterish, yielding by incision a yellow juice, drying into a gum resin —

60 PENTANDRIA. DIGYNIA. *Tordylium*.

330. *TORDYLIUM*. Cor. radiate, all the florets hermaph. Fruit somewhat orbicular, margin (thick) crenate. Invol. long, undivided. *Stem rough & hispid - bristles deflexed* 1. T. Umbels crowded, radiate, leaflets lanceolate, incisely serrated (terminating leaflet linear-lanceolate; involucrets longer than the florets). Banks of fields. A. 6. Ger. 1021 & 104.
- Stem pubescent officinale. Hair's deflexed, soft. Leaves pinnate, hairy -* 2. T. Involucrets as long as the flowers, leaflets ovato-lanceolate (terminating leaflet rather cuneiform). Small Hartwort. Cornfields. A. 6. Ger. 1050. 1.
- Stem 18 inches knotty - branches divaricate* 3. T. Umbels crowded, leaflets ovato-lanceolate, pinnatifid. See *Caucalis Anthriscus*. Page 59.
- Stem 18 inches knotty - branches divaricate* 4. T. Umbels simple sessile, outer seeds hispid. See *Caucalis nodosa*. Page 59.
339. *PEUCEDANUM*. Fruit ovate, on both sides striated, surrounded with a wing. Invol. very short.
- Stem 2 or 3 feet branch 4 forked xx* 1. P. Leaves 3 times 3-parted, filiform, linear. Hb. & Fennel. Salt marshes. P. 6. 7. Ger. 1054. 1.
- Stem 2 or 3 feet branch 4 forked xx* 2. P. Leaves pinnate, leaflets pinnatifid, segments linear, opposite, stem very much branched, patulous. Huds. Ed. 1. Lin. See *Pimpinella*.
- Stem branch 2 forked Plate yellow, divided by a midrib* 3. P. Leaflets pinnatifid, segments opposite, universal involucre 2-leaved. Meadow Saxifrage. Meadows. P. 8. Ger. 1048. 2.
336. *CONIUM*. Involucre halved, about 3-leaved. Fruit nearly globular, 5-striated, on both sides crenate.
- Root periform maculate white. Leaves shining, bald, of a strong odor* 1. C. Seeds striated, (without prickles; stem much branched, smooth, spotted.) Common Hemlock. Hedges, &c. B. 6. 7. Curt. 1. 7.
335. *BUNIA*. Cor. uniform. Umbel crowded. Fruit ovate.
- Root bulbous. Bulbous. Brown on outside. Flowers small white. flexuosum* 1. B. Invol. many-leaved, stem with leaves at the base, rising from the root, styles deciduous. Ger. 1064. 2.
2. B. Involucre 1—3-leaved, deciduous; stem leafless at the base, tapering downwards, flexuose, styles permanent. WITH. Earth Nut. Pastures, &c. P. 5, 6. Ger. 1064. 1.
338. *ATHAMAN'TA*. Fruit ovato-oblong, striated. Pet. inflexe-emarginate.
- Conium - Root supposed poisonous but Mr. Healy eat 3 ounces and felt no effect. It has the taste of Celery. Leaves in powder have been administered & used in gonorrhea. Conium having a spotted stalk is sometimes sold for it.*

PENTANDRIA. DIGYNIA. Athamanta.

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Root periform, woody, acid, bitterish. Stem 2 feet, erect.

1. A. Leaves bipinnate, flat; umbel hemispherical; seeds hirsute. A. Oreoselinum. Huds. Libano' tis. deeply furrowed, hanchy.

Mount. Spiguel. Gogmagog hills. P. 8. 9. E. B. 138.

328. BUTTEU' RUM. Involucrets larger (than the umbels); 5-leaved. Pet. involute. Fruit roundish, compressed, striated. H. H. of calyx smooth.

4. B. Universal Invol. none, leaves perfoliate. (Involucrets ovate, mucronate.) Corolla yellow. Stem erect. Com. Thoroughwax. Cornfl. A. 6. 7. E. Bot. 99. 2 feet

2. B. Umbels (axillary) simple, alternate, (invol.) 5-leaved, about 3-flowered. Corolla yellow. Stem 1 ft. Least Thoroughwax. Past. A. 7. 8. E. Bot. 478. tenuis' si- mum.

348. SI' UM. Fruit somewhat ovate, striated. Invol. many-leaved. Pet. cordate. (Styles bent back.)

1. S. Umbels terminating; leaves pinnate (leaflets oblongo-lanceolate, equally serrated. E. Bot.). Root creeping, acid, supports like parsnep. Broad-leaved Skirrett. Fens. P. 7. 8. E. Bot. 204. latifo' lium. Stem angular.

Obs. When growing under water, the root-leaflets deeply incised, segm. linear. Huds.

2. S. Leaves pinnate, umbels axillary, peduncled, invol. pinnatifid. (Leaves pinnate, leaf. cordate, lobed, unequally serrated; umbels peduncled, oppositifolious and terminating. Huds. Second pair of leaf. very distant from the first. GOUAN.) angustifo' lium. upright. peduncled, hemispheric.

Upr. Water Parsnep. Ditches. P. 8. 9. E. Bot. 139.

3. S. Leaves pinnate (leaflets dentato-serrated), umbels axillary, sessile (or peduncled, opposite the leaves). nodiflo- rum. Root creeping or running leaflets segm.

Creeping Water Pars. Ditches. P. 8. 9. Pet. 26. 3. umbels sessile & erect.

4. S. Stem creeping, leaves roundish, toothed, angular. Moist ground. P. 6. 7. Jacq. Austr. 260. re' pens.

337. SELI' NUM. Fruit oval-oblong, compressed, flat, striated in the middle. Involucre reflected. Petals cordate, equal. Stem single 4 feet. hanchy at top umbels flat, fruit ovate & palustre. all yellow.

1. S. Plant somewhat milky, root single. (Stem solitary, styles diverging after flowering; petals involute.) Marsh Milkweed. Wet moors. P. 6. 7. E. B. 229. herb lactescent the juice white & creamy bitter foliol

340. CRITH' MUM. Fruit oval, compressed. Florets equal.

Stem nodosum, juice in doses of 2 to 4 oz. with oil is an excellent alternative in cutaneous affec.

See *Ligusticum scoticum*. Root caustic, leaves
 bit used as a salad or potherb, and an infusion of the leaves
 as a purgative for colic.

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PENTANDRIA, DIGYNIA, Crithmum;

(Stem much branched a foot high
 in yellow maritimum. 1. C. Leaflets lanceolate, fleshy,
 on large umbels. Rock Samphire. Seacoast. P. 8. Ger. 533. 1.

346. *LIGUSTICUM*. Fruit oblong, 5-furrowed
 on each side. Cor. equal, petals involute,
 entire.

Stem 2 or 3 ft. scoticum. 1. L. Leaves biternate. Flowers small white
 branched at top. Scot. Lovage. Rocks by the sea side. B. 7. Pet. 26. 11.

2. L. Leaves decompound, incised; root-leaves ter-
 nate, lanceolate, very entire.

Stem 3 or 4 feet. Cornwall Saxifrage. Bodmin in C. P. 7. Ray syn. 8.

347. *ANGELICA*. Fruit roundish, angular, solid.
 Styles reflected. Cor. equal, petals bent in-
 wards.

Archange- 1. A. (Leaves pinnate) the odd one at the end three-
 lica. lobed.

Stem 5 or 6 ft. sylvestris. 2. A. Leaflets equal, ovate-lanceolate, serrated.
 Broadmoor, near Birming. P. 9. Ger. 999. 1.

Fl. small greenish white Wild Angelica. Meadows. P. 9. Ger. 999. 2.

349. *SILSON*. Fruit ovate, striated. Invol. about
 4-leaved.

Amomum. 1. S. Leaves pinnate, umbels erect.
 Bastard-Stone Parsley. Woods. P. 8. 9. Ger. 1016. 1.

seg'etum. 2. S. Leaves pinnate, (leaflets roundish,) umbels cer-
 nuous.

inunda- 3. S. Creeping, umbels bifid. (Involucre of leaves
 tum. under water capillary, those above pinnate.)

Water Stonewort. Ditches, &c. B. 6. E. Bot. 227.

verticilla- 4. S. Leaflets verticillate, capillary.
 tum. Verticillate Stonewort. Pastures. P. 8. E. Bot. 395.

355. *ÆTHUSA*. Involucrets halved, 3-leaved,
 pendulous. Fruit striated.

Cyna'pium. 1. Æ. Leaves all alike (fruit nearly globular).
 Leaves dark green. Fools Parsley. Cornfields, &c. A. 8. 9. Curt.

Me'um. 2. Æ. All the leaves many-parted, the segments se-
 taceous. (Involucre of rarely 1-leaved.) Atha-

manta. Meum Sp. Pl. and Huds.
 Com. Spignel. Mount. Meadows. P. 5. Ger. 1052. 1.

356. *CORIAN'DRUM*. Cor. radiate. Pet. inflexo-
 emarginate. Invol. 1-leaved. Involucret

halved. Fruit spherical.

sati'dum. 1. C. Fruit globular.
 Common Coriander. Road sides. A. 6. 7. E. Bot. 67.

Cori'x. Fools Parsley - When eaten by mistake for parsley it is ca-
 scious, which may be stopped by very large doses of

bandy - It is dieterian to gase

Angelica sylvestris - Root aromatic rather bitter, used much

conded as an agreeable stimulant & antispasmodic.

* *Chervil* - The roots are poisonous, but occasionally used as a
 apothecary, is much liked by cows - diges a beautiful green
 umbels, dye yellow - Plant indicates a fruitful soil.

PENTANDRIA. DIGYNIA. Scandix.

63

357. SCAN'DIX. Cor. radiate. Fruit subulate.
 Petals emarginate. Florets of the disk
 often male.

1. Seeds furrowed, angular. *Priscapla* *in the north to lotis* *odora'ta. Root aromatic,*
 Sweet Cicely, Hedges, &c. A. 5. 6. Ger. 1039. 8. *Leaves trifoliate, pale green,*

2. S. Seeds with a very long beak. *Pecten. Leaves bipinn*
 Com. Shepherd's Needle. Cornfields. A. 6. 7. Curt. *nate; leaflets pinnatifid*

3. S. Seeds shining, ovate-subulate (and beaked), *Cerefo'lum. Stem 3 feet*
 umbels lateral, sessile. *furrowed, fruit turned x*
 Chervil Shep. Needle. Hedges. A. 5. Ger. 1038. 1.

4. S. Seeds ovate, hispid, corols uniform, stem *Anthris'- Stem 3 feet*
 smooth. See *Caucalis scandicina*. Page 59. *cus. Shining leaves*

358. CHÆROPHYL'IUM. Involucret reflected,
 concave. Pet. inflexo-cordate. Fruit
 oblong, smooth. *light green finely*
umbels 4 or 8 rays
a good salad

1. C. Stem smooth, striated, joints rather swoln. *sylves'tre.*
 Cow-weed Chervil. Hedges. P. 5. 6. Curt. 273.

2. C. Stem rough (spotted); joints swoln. (In- *tem'ulum. Stem 3 feet*
 volucres 0, or 1-4-leaved. Involucret 1- *leaves turned*
 leaved, 6 or 8-cleft. RELHAN.) *umbels droop scald*

Wild Chervil. Hedges, &c. P. 5. 6. F. Dan. 918. *the flower*

353. PHELLAN'DRIUM. Florets of the disk
 smaller. Fruit ovate, smooth, crowned
 with the perianth and pistils.

1. P. Ramifications of the leaves diverging. *aquat'icum. Droughty*
 Water Hemlock. Ditches. B. 6. 7. Woodv. 266. *Stem 3 feet*

359. IMPERATO'RIA. Fruit roundish, com-
 pressed, gibbous in the middle, with a
 membranous margin. Pet. inflected, e-
 marginate. Umbels compressed, flat. *Root acid & bitter*

1. IMPERATORIA. used as a diuretic in rheum. *Ostru'- toothack*
 Masterwort. Banks of the Clyde. P. 6. Woodv. 35 *thium. in the middle*
used successfully in gonorrhea & other cases, where bark has failed

354. CICH'TA. Fruit nearly ovate, furrowed.

1. C. Umbels opposite the leaves, petioles mar- *vir'o'sa. Poisonous*
 ginate, obtuse (stipules running up the pe- *to franklin & Hume*
 tioles. E. BOT.), *umbels many rayed convex* *not to harm, sheep &*
 Water Hemlock. Ponds, &c. P. 7. 8. F. Dan. 208. *goats; the smell being*

363. SMYR'NIUM. Fruit oblong, striated. Pet. *weak in spring, comes*
 acuminate, keeled. *as it is killed by it but*
afterwards they can smell it

1. S. Stem leaves ternate, petioled, serrated. *Olusa'trium.*
 Alexanders. Ditches, &c. B. 5. 6. E. Bot. 330. *Root fleshy - common in*
south America

Cultivated Chervil is slightly aromatic, and used in salad.

Water Hemlock renders horses paralytic, the disease being
 brought on by an insect (*musculus paralyticus*) not inhabits
 the stems and is cured by high dressing - leaves discoloured in
 Poultries - seeds in doses of 1 to 3 drams used for agues

365. CARUM. Fruit ovato-oblong, striated; Involucres 1- (sometimes 4 or 5) leaved, deciduous. Pet. keeled, inflexo-emarginate.

Car'ui. 1. CARUM. *leaves pinnate - lobes sessile*
Common Caraway. Meadows. B. 5. 6. Mart. 55.

362. PASTINACA. Fruit elliptical, compressed, flat. Pet. involute, entire.

sativa. 1. P. Leaves simply pinnate. (Leaflets incised, invol. 4 or 5-leaved, leaflets unequal. PERS.)
Wild Parsnep. Chalky pastures. B. 6. 7. Mart. 83.
Ger. 1025. 1. A Var. with broader leaves.

364. ANETHUM. Fruit nearly ovate, compressed, striated. Pet. involute, entire.

1. A. Fruit ovate (leaves many-parted, capillary).
Common Fennel. Chalk cliffs. B. 7. 8. Woodv. 160.

368. ACOPO'DIUM. Fruit ovato-oblong, striated (acuminate at each end).

1. A. Highest stem leaves ternate. (Lower ones triternate, fruit compressed; styles reflected.)
Herb Gerard. Road sides. P. 5-8. F. Dan. 670.

367. A'PIUM. Fruit (small) ovate, striated. Involucres 1-leaved. Pet. equal. (Styles reflected.)

1. A. Stem-leaves cuneiform. *leaves yellow-green*
Smallage. Ditches, &c. B. 8. F. Dan. 790.

366. PIMPINEL'LA. Fruit ovato-oblong (striated). Pet. inflexed. Stigm. nearly globular (styles erect).

saxif'raga. 1. P. Leaves pinnate, leaflets of the root-leaves roundish, of the upper ones linear.

Var. 1. All the leaflets ovate, serrated. Gerard 887. 1. 2.

2. Leaflets of the root-leaves ovate, serrated, of the lower stem-leaves linear, mostly entire, bractes linear. Ger. 1044. 2. 3. 4.

3. Leaflets of the root-leaves ovate, serrated, of the lower stem-leaves deeply pinnatifid, bractes pinnate. F. Dan. 669. E. Bot. 407.

4. All the leaves bipinnate, leaflets linear, mostly entire, bractes pinnate. RELHAN.

5. dissecta. Root-leaves bipinnate, leaflets pinnatifid, segm. entire; stem-leaves bipin-

Pastinaca - Roots are turned into an agreeable wine, or with
Lob. her - Seeds foliifera, contain an essential oil -

Sambucus racemosa - Dwarf elder - Root violently cathartic in doses of ʒiſſ - Leaves drive away mites and are ſuppoſed to prevent diſeaſe in ſwine, & uſed as ſtick - Berries ſhine blue

PENTANDRIA. DIGYNIA. Pimpinella. 65

nate, leaflets entire, bractes bifid. Retz iii.
t. 2. See With. V. 2. P. 311, &c.

Sm. Burnet Saxifrage. Dry ſoil. P. 8. g. E. B. 407.

2. P. All the leaves lobed, the odd one 3 lobed. mag'na. *Stem ſtrike*
(Leaves pinnate, leaflets nearly ovate, the terminal 3-lobed. E. Bot.) *Large white x Root acris*
Great Burnet Saxif. Hedges. P. 8. g. E. Bot. 408. *Leafy like pepper*
Var. 2. Leaves laciniated. DILL. in Ray. ſyn.
213. Pet. 26. 6.

3. P. Dwarfish, umbels very numerous, compound dioica.
and ſimple. (Male and herm. flor. on diſtinct
plants. MUR. Flow. dioicous; leaves almoſt
bipinnate, leaflets linear, ſimple and 3 together.
HUDS.)

Least Anise. Mount. pastures. P. 5.6. Ger. 1054.3.

TRIGYNIA.

370. VIBURNUM. Cal. 5-parted, ſuperior. Cor. 5-cleft. Berry 1-seeded.

1. V. Leaves cordate, ſerrated, veined, tomentous underneath. *club like - flowers ſemibellid - berries black*
Way-faring Tree. Hedges, &c. S. 5. E. Bot. 331.
2. V. Leaves lobed, petioles glandular. *Op'ulus. Leaves 3 lobed*
Guelder Rose. Hedges, &c. S. 5.6. E. Bot. 332. *Sharp toothed, opposite*
372. SAMBUCUS. Cal. 5-parted. Cor. 5-cleft.
Berry 3-seeded.

1. S. Cymes 3-parted, ſtipules leaf-like, ſtem herbaceous. *leaves 3 parted*
Dwarf Elder. Hedges. S. 7. Curtis. E. Bot. 475.
2. S. Cymes 5-parted, leaves pinnate, leaflets nearly ovate, ſerrated, ſtem arborescent. *leaflets mostly fine*
Com. Elder. Damp hedges. S. 4. 5. E. Bot. 476. *Page 60*

376. STAPHYLEA. Cal. 5-parted. Pet. 5. Caps. inflated, united. Seeds 2, globular, with a ſcar. *Calyx with a pitcher ſhape - diſk, red, berry globular*

1. S. Leaves pinnate. (Styles ſometimes 2.) *pinna'ta.*
Bladder Nut Tree. Hedges. S. 6. Ger. 1437. *Stem ſhort branchy, bald*
leaflets 5 ovate, 2 cleft ſerrated
380. ALSINE. Cal. 5-leaved. Pet. 5, equal.
Caps. 1-celled, 3-valved (or 6-valved.
PERS.).

1. A. Petals 2-parted, leaves ovato-cordate. (Stam. media.
3-7.) Stellaria media. WITH. See Stellaria.

Pimpinella magna - Root ſialogogue uſed as a masticatory, in tooth ache, alſo externally to take away peckles, and in gargar to diſſolve viſcid mucus
Thymum ſylveſtre - Bark affords ſtridline - Berries aſtringent

Chickweed. Very common. A. 3. 10. Curt.

378. CORRIGI'OLA. Cal. 5-leaved (border membranous, white). Pet. 5. Seed 1, 3-cornered. (Nut roundish, 3-cornered. GAERTN.)

Root slender littora'lis. 1. CORRIGIOLA. *Flowers 5-angled, small*
Stems many simple Sand Strapwort. Sands. A. 6—9. F. Dan. 334.

Leaves linear, lanceolate, fleshy - Flowers white
375. TAM'ARIX. Cal. 5-parted. Pet. 5. Caps. 1-celled, 3-valved. Seeds pappous.

Leaves lance. gallica. 1. T. Flowers with 5 stamens (in long slender spikes).
Stems embracing, imbricate Western coast. S. 7. Mill. pl. 262. 1.
Leaves, drooping, red, shining - Leaves smooth. Flowers flesh color

TETRAGYNIA.

384. PARNAS'SIA. Cal. 5-parted. Pet. 5. Nect. 5, cordate, ciliate, ciliae terminated by little globes. Caps. 4-valved.

Stems 3-ribbed scales palustris. 1. PARNASSIA. *Root leaves heart shape*
tufted - Root fibrous Grass of Parnassus. Moist pl. P. 8. E. Bot. 82.
Plant heart shape with bell-shaped veins - Stems at first erect then
in the field, then upright - Another heart shape

PENTAGYNIA.

388. STAT'ICE. Cal. 1-leaved, entire, plaited, scariosc. Pet. 5. Seed 1, superior.

arméria. 1. S. Scape simple, capitate, leaves linear. (Calyx-scales roundish, obtuse. AITON.)

Common Thrift. Sea coast. P. 5. 6. E. Bot. 226.

Limo'nium. 2. S. Scape panicled, cylindrical, leaves, smooth, nerveless, mucronate.

Lavender Thrift. Sea coast. P. 7. 9. E. Bot. 102.

reticulat'a. 3. S. Scape panicled, prostrate, barren branches retroflected, naked, leaves cuneiform, awnless.

Matted Thrift. Norfolk coast. P. 7. 8. E. Bot. 328.

389. LI'NUM. Cal. 5-leaved. Pet. 5. Caps. 5- (10-) valved, 10-celled. Seeds solitary.

1. Leaves alternate.

Leaves 3-ribbed usitatis'si- 1. L. Calyxes and capsules mucronate, petals crenate, leaves lanceolate, stem generally solitary.
Root small stem mum.

Stems fleshy, rather - Leaves notched at top Common Flax. Cornfields. A. 7. Martin 133.

Petals light blue, streaked perenn'ne. 2. L. Cal. and caps. obtuse, leaves lanceolate (alternate) entire. *Petals notched, blue*

Root woody Perennial Flax. Chalky soil. P. 6. 7. E. Bot. 40.

Stems usitatis'si - Fibres of stem used for thread and cloth
Seeds yield oil and furnish a febrifugal infusion - Furina of
the seeds small? in poultices, as also the cake left after pressing
of the oil, which last is likewise used to feed broken minded horses
to soften cattle and for many uses

Drosera rotundifolia - leaf-hairs support 'soboles of liquor' even in the hottest weather, are very in. tall and close upon small insects, that touch them after which the leaf bends and holds the dead insect imprisoned.

PENTANDRIA. PENTAGYNIA. Linum. 67

- 3. L. Calyxes acuminate, leaves scattered, linear-
 setaceous, rough downwards. *tenuifolia*
um.
 Narrow-leav. Flax. Mead. P. 6. 7. Jacq. Aus. 215.
- 4. L. Cal. (indistinctly 3-nerved) and caps. acumi-
 nate; leaves linear-lanceolate, (3-nerved) *angustifolia*
um. *Twigs peruviana*
Petal humble
 acuminate; stem branched at the base, a little declined. Hubs. E. Bot. L. *tenuifolium*
 & Lin. var. 2. With.
- Dry sandy pastures. P. 6. 7. E. Bot. 381.

2. Leaves opposite.

- 5. L. Leaves opposite, ovato-lanceolate, stem di-
 chotomous, corols (petals) acute. (Flowers *cathartica*
 before opening pendulous.) *cum. Dried plant*
imposed in urine purgative useful
in rheumatism
 Purg. Flax. Dry pastures. A. 5—7. Mart. 135.
- 6. L. Leaves opposite, stem dichotomous, flowers *Radiola*
 tetrandrous, tetragynous. *Radiola linoides* *seems very much for food*
 Roth. Fl. germ. p. 91. *Flowers minute, and white.*
Solitary -
 All-seed Flax. Sandy heaths. A. 8. F. Dan. 178.

391. DRO'SERA. Cal. 5-cleft. Pet. 5. Caps. 1-
 celled, 5-valved at the apex. Seeds nu-
 merous.

Obs. This genus has been removed by Hudson to the Order Hexagynia, and, as far as relates to the British species, with propriety; for in no one instance have I found 5 pist.: the prevailing number is 6, and we not unfrequently find 8. It has not occurred to me to observe 8 pist. more frequently in *D. anglica*, than in *longifolia*, but rather the contrary; and I have never met with 8 in *D. rotundifolia*. When the number of pist. is 6, they always go off in 3 pairs, each pair being united at the base; when 8, in 4 pairs; and the number of valves corresponds with the the number of pairs of pist., being 3 when the pist. are 6, 4 when they are 8, never 5, as is stated by I in. in the character given above. What I have here asserted is to be understood only of the British plants.

- 1. D. Scapes from the root (straight), leaves orbicular (petioles hairy). *rotundi-* *leaves very oblong*
folia. concave covers
above with reddish lines
leaves upright.
 Round-leaved Sundew. Bogs. P. 7. 8. Ger. 1556. 1. *longifolia.*
 Var. 2. Scape branched. Ger. 1556. 1. right hand f. *leaves radical*
- 2. D. Scapes from the root (curved at the base, passing off horizontally and becoming suddenly erect), leaves ovali-oblong. (Caps. obconical.)
 Long-leaved Sundew. Bogs. P. 7. 8. Ger. 1556. 2.
 Var. 2. Scape branched.
- 3. Caulscent. H. ox. xv. 4. row 1. fig. last but one, only the scape is too straight.

Drosera rotundifolia - Plant acid concretion supposed to be used to rot in sheep, and carder's milk - juice removes warts and corns; infusion in milk takes away freckles and wrinkles - infused with wine produces a very stimulating spirit - can be made into a tincture spirit and sweetened formerly much used

Obs. This is in every respect like var. 1., except that there is a stem, which in some instances is full two inches in length, with numerous leaves. I have always found it growing among Sphagnum palustre, in moist bogs on heaths, and at first thought that the plant pushed up to a greater height, on account of the moss growing quickly around it, and that this appearance of stem was rather to be considered as an elongation of the root; but I have doubted of this since I have found the stem leafy, and that the other two species of Drosera, though growing exactly in the same situation, and within a few inches of the *longifolia*, do not assume this caulescent form.

leaves radical ang'lica.
scapes 12 inches high

3. D. Scapes from the root, straight; leaves oblongo-cuneiform; caps. oblong.

Great Sundew. Moist bogs. P. 7. 8. H. ox. xv. 4. 1.

Obs. Ray has given 5 species of Drosera, two of which are annual, and three from Willisell, which are perennial; but as his annual *rotundifolia* and *longifolia* differ in no other respect than their duration from his perennial *rotundifolia* and *longifolia*, and it is very doubtful whether any of the species are annual, we have reason to believe that they only constitute two species. See Ray's Synops. 356. and Hist. 1190. H. ox. iii. 620.

Petals lanceolate acute
as long as the calyx
hard wood procum'-
bens.

393. SIBBAL'DIA. Cal. 10-cleft. Pet. 5, inserted in the calyx. Styles from the side of the germen. Seeds 5.

1. S. Leaflets 3-toothed. Sold above, raised beneath
Procumbent Silver-weed. Mount. P. 7. 8. F. Dan. 32.

POLYGYNIA.

394. MYOSP'RUS. Cal. 5-leaved, leaves united at the base. Nect. 5; subulate, (tubular) petaliform. Seeds numerous. (Recept. very long.)

scapes 1 flowered minima. 1. MYOSURUS. leaves linear, not cut
as long as the leaves 3 to 6 Little Mouse-tail. Cornfields. A. 5. 6. Curt. 251.
from same root - flower pale yellow - petals rarely on the side

Ericaria Lyimleum - stem hard for tobacco pipes; wood hard
used for teeth of rakes

ambrosia niger - Plant narcotic wood hard, tough, yellow;
inner bark purgative, acrid, and in small doses dissects
leaves purgative, drive away insects; flowers in decoction
diaphoretic, and expectorant used to flavour vinegar,
deleterious to turkeys; berries poisonous to all poultry, Expectorant
and diaphoretic, used to colour wine - Page 65

Rhamnus alnoides - Inner bark purgative in doses of
two to 4 grains in infusion also dies yellow - Wood makes
soft charcoal, fit for gunpowder.

Rhamnus cathartica - Juice of the ripe berries yellow
 used in staining; of the ripe berries cathartici
 Sipping made into a Syrup and corrected in some
 measure by ginger and clove, also boiled then
 down into a green water. Some called sap green
 when gathered late in autumn the juice is purple.

CLASS VI. Rush used to dye yellow

HEXANDRIA.

MONOGYNIA.

1. Fl. furnished with calyx and corol.

- 442. BER'BERIS. Cor. 6-petalled. Cal. 6-leaved, inferior. Berry 2-seeded.
- 445. FRANKE'NIA. Cor. 5-petalled. Cal. 1-leaved, inferior. Caps. 1-celled, many-seeded.

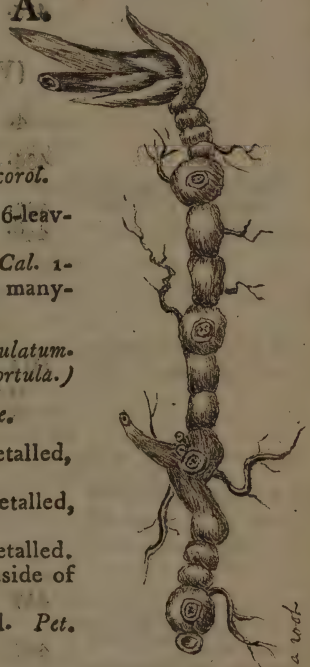
(V. *Hottonia palustris*. VI. *Anthericum calyculatum*. XII. *Lythrum hyssopifolium*. *Peplis Portula*.)

2. Fl. with a Spathe or Glume.

- 402. LEUCO'JUM. Cor. superior, 6-petalled, campanulate. Stamens equal.
- 401. GALAN'THUS. Cor. superior, 6-petalled, 3 inner petals shorter, emarginate.
- 403. NARCIS'SUS. Cor. superior, 6-petalled. Nectary campanulate, on the outside of the stamens.
- 409. AL'LIUM. Cor. inferior, 6-petalled. Pet. ovate, sessile.

3. Fl. naked. (Without calyx.)

- 425. CONVALLA'RIA. Cor. inferior, 6-cleft. Berry 3-seeded.
- 427. HYACIN'THUS. Cor. inferior, 6-cleft. Germen with 3 melliferous pores at the top.
- 422. ANTHE'RICUM. Cor. inferior, 6-petalled, flat.
- NARTHE'Cium. Cor. inferior, 6-petalled. Style o. Seeds tailed at each end.
- 418. ORNITHOC'ALUM. Cor. inferior, 6-petalled. Filam. alternately broader at the base.



The Stock-root, or subterraneous stem of Solon's real Polygonum vulgare. It regular distaves may be seen the circular marks arising from the shoots of former years. The species of stem in that wood has received the name of progressive, segmented or perennate root. It is a true stem, and properly shooting not a root.

HEXANDRIA.

419. SCIL'LA. Cor. inferior, 6-petalled, deciduous. *Filam. filiform.*
 424. ASPAR'AGUS. Cor. inferior, 6-petalled. Berry 6-seeded.
 411. FRITILLA'RIA. Cor. inferior, 6-petalled, with a nectariferous hollow at the base, ovate.
 415. TU'LIPA. Cor. inferior, 6-petalled, campanulate. Style o.

(VI. *Juncus.* VIII. *Polygonum Hydropiper.*)

4. *Fl. incomplete.* (Without petals.)

434. AC'ORUS. *Spadix* many-flowered. Caps. 3-celled.
 437. JUN'CUS. Cal. 6-leaved. Caps. 1-celled.
 446. PER'LIS. Cal. 12-cleft. Caps. 2-celled.

DIGYNIA.

(VI. *Rumex Digynus.* VIII. *Polygonum persicaria et Hydropiper.* XI. *Agrimonia Eupatoria.* X. *Scleranthus annuus.* XXI. *Quercus.*)

TRIGYNIA.

1. *Flowers inferior.*

457. COL'CHICUM. Cal. a spathe. Cor. 6-petaloid.
 453. TRIG'LOCHIN. Cal. 3-leaved. Cor. 3-petalled. Caps. opening at the base.
 451. RU'MEX. Cal. 3-leaved. Cor. 3-petalled. Seed 1, 3-cornered.
 — TOFIEL'DIA. Cal. o. Cor. 6-petalled. Caps. 3-celled, 6-valved.

(VI. *Anthericum caliculatum.* VIII. *Polygonum viviparum.* XXI. *Quercus.*)

HEXAGYNIA.

(*Alisma Damasonium,* XX, *Aristolochia.*)

Pericarpis - Root dyes wool and leather yellow. Bark contains
 some purgative, inner bark w. alum dyes linen yellow.
 leaves acid. eaten as sauce - flowers offensive to smell when
 too near; berries acid. **HEXANDRIA.** not eaten by birds, boiled
 with sugar yield a pleasant confection. is supposed by some
 to cause wheat growing moulden. otherwise near it but
 this is denied by others. **POLYGYNIA.**

460. **ALIS'MA.** Cal. 3-leaved. Cor. 3-petalled.
Pericarpis several.
 (Triglochin maritimum.)

MONOGYNIA.

- 442. **BER'BERIS.** Cal. 6-leaved. Pet. 6, 2 glands
 on their claws. Style o. Berry 2- (or 3)
 seeded.
- 1. **B.** Peduncles racemous, thorns 3-fold. *leaves in bundles, several at a joint, winged, toothed*
vulgaris. Branches
 Com. Barberry. Hedges, &c. S. 5. 6. E. Bot. 49. *angular, not yellow*
- 445. **FRANKE'NIA.** Cal. 5-cleft, funnel-shaped.
 Pet. 5. Stigma 6-parted. (Stigmas 3.)
 Caps. 4-celled, 3-valved.
- 1. **F.** Leaves linear, crowded, ciliate at the base. *la'vis.* flowers solid?
 Smooth Sea-heath. Salt marsh. P. 7. 8. E. Bot. 205. *stem forked, trailing*
flowers from forks of stem - Petals flesh-colored
- 402. **LEUCOJUM.** Cor. campaniform, 6-parted,
 (segm.) thickened at the points. Stigma
 simple. *herb bulb. bulb round, truncated, leaves many*
radical, keeled -
- 1. **L.** Spathe many-flowered, style club-shaped. *ast'ivum.* scape 2 or 3 fl.
 — Side of the Thames. P. 5. Curt. Ger. 148. 4. *flowers white, dark*
green at top
- 401. **GALAN'THUS.** Pet. 3, concave. Nect. 3
 smaller petals, emarginate. Stigma. sim-
 ple. *herb bulbous, bulb ovate truncated, leaves 2 radical*
- 1. **GALANTHUS.** *glaucon, keeled - sheath membranaceous, not rich*
 Snow-drop. Meadows, &c. P. 2. 3. E. Bot. 19. *nivalis.* scape round
not included in sheath
- 403. **NARCIS'SUS.** Pet. 6, equal. Nect. (mostly)
 funnel-shaped, 1-leaved. Stam. within
 the nectary. *flowers 6, red and 6*
white tipped w green
- 1. **N.** Spathe 1-flowered, nectary rotate, very
 short, scariose, slightly crenate. (Leaves ob-
 tusely keeled, with a reflected margin. E.
 Bot.) *poeticus?*
flower upright, very fragrant
fragrant snow-white
crown of red & scarlet & purple
 Poetic Narcis. Sandy heaths. P. 5. E. Bot. 275.
- 2. **N.** Spathe 2-flowered, nect. rotate, very short,
 scariose, (finely) crenate, leaves acutely keel-
 ed, with an inflected margin. E. Bot. Curt.
 Bot. Mag. 197. *biflorus.*
spathe 2 or 3 fl. red
flor. yellow white
crown yellow
 Pale Daffodil. Meadows, &c. P. 5. E. Bot. 276.

- Scape 2 edged* Pseudo- 3. N. Spathe 1-flowered, nect. campanulate, erect,
reddish Narcissus. curled, as long as the ovate petals.
striated. Flower yellow Com. Daffodil. Woods, &c. P. 3. 4. E. Bot. 17.
outer lobes elliptic lanceolate
inner straight, crenate 409. ALLIUM. Cor. 6-parted, (6-petalled) spread-
senate, the length of the lobes ing. Spathe many-flowered. Umbel dense.
 Caps. superior.

1. Stem-leaves flat. Umbel capsule-bearing.

- Ampelo- 1. A. Umbel globular, stamens 3-pointed, petals
 pra'sum. rough on the keel.

Round-head. Garlic. Isle of Holmes. P. 7. Ger. 180. 2.

2. Stem-leaves flat. Umbel bulb-bearing.

- Umbel globe arena'rrium. 2. A. Sheaths cylindrical, spathe pointless, stamens
 3-pointed.

Sand Garlic. Mountains, &c. P. 6. 7. Ger. 187. 4.

- Root & plant carina'tum. 3. A. Stamens subulate. (Spathe very long, leaves
scanth. Stem 4 feet high linear, channelled, sheathing. Leaflets of the
flowers brownish purple spathe two very long, one shorter. PERS.)
Stem bulb. bearing Mountain Garlic. Rocks, &c. P. 6. 7. Ger. 187. 5.
leaves linear keeled Spathe 2 parted

3. Stem-leaves cylindrical. Umbel bulb-bearing.

- vinealle. 4. A. Stam. 3-pointed.

Crow Garlic. Meadows, &c. P. 6. Ger. 179. 1.

- Bulb & plant olera'ceum. 5. A. Leaves (not always) rough, semi-columnar
scape upright 3 feet (fistulous), furrowed underneath, stam. simple.
Spathe bellied at bottom Wild Garlic. Meadows, &c. P. 7, Ger. 188. 6.

- much longer than the umbels. Flowers few greenish purple*
umbels bulb bearing 4. Leaves from the Root. Scape naked.

- ursilnum. 6. A. Scapes triangular, leaves lanceolate, petioled,
 umbel fastigate.

Ramsons. Woods, &c. P. 5. E. Bot. 122.

- leaves round Scheno- 7. A. Scape naked, as long as the leaves, leaves cy-
 thead-like pra'sum. lindrical, subulato-filiform.

Chived Garlic. Pastures, &c. P. 6. F. Dan. 971.

- scapes, in tufts, as long as*
the leaves 425. CONVALLA'RIA. Cor. 6-cleft. Berry spot-
 ted, 3-celled.

- Conval. maj. Flowers white*
leaves red - Flowers rare Corols campanulate.





- 3. shining, exhort of root & flowers 6 parted funnel shaped in lower*
2. Scapular majalis. 1. C. Scape naked (semi-cylindrical, flowers spiked,
 nodding. WITH.)


leaves dry a beautiful Lily of the Valley. Woods, &c. P. 5. Curt. 302.


- green* 2. Corols funnel-shaped.

- stem upright* verticilla'ta. 2. C. Leaves verticillate. *leaves 3 4 7 in a*
angular 3 feet, naked at bottom, peduncles branching leaves 10

Myrcianthus

Mar 20 - Pollen of following figure 
and apparently smooth - The capsule
is shaped thus  The ovules thus  
on each side of the dissepiment to the central
column in a double row

May 10th The capsule is much enlarged, some seeds seen
to be growing and others remain stationary as if
the last were to be abortive -  The seed is a

little more lengthened - May 20 The capsule is near
ripe now than half of the ovules have become
abortive the seed is of the following shape 

Hyacinthus non-scriptus - Root, when fresh & vigorous, may be converted into starch or prepared as a substitute for *S. arable*.
Convallaria multiflora - Roots may be made into bread & young shoots
 HEXANDRIA. MONOGYNIA. *Convallaria*. 73 taken as *Asph.*

Narrow-leaved Solomon's S. Perth. P. 7. E. B. 280.

3. C. Leaves alternate, embracing the stem, stem *Polygona*-^{stem 3 inches} 2-edged (angular); peduncles axillary, mostly ^{tum. drooping - leaves} 1-flowered. ^{facing one way - Root may be made into bread}

Sweet-smelling Sol. Seal. Rocks. P. 5. 6. E. Bot. 280.

4. C. Leaves alternate, embracing the stem, stem ^{2 feet} *multiflora*. Stem ^{drooping} cylindrical, peduncles axillary, many-flow-^{leaves oval elliptical altered.} ^{filaments hairy, leaves facing one way}

Com. Solomon's S. Woods. P. 5. 6. E. Bot. 279. See its Root Page 60.

427. HYACINTHUS. Cor. campanulate. Germen ^{ovate trilocated} with 3 nectariferous pores at the top. ^{filaments single, filiform} (Cor. 6-parted, segm. revolute. WITH.) ^{inserted into the middle of}

1. H. Corols campanulate, 6-parted, the points re-^{non-scriptus - the last - flower} volute. See *Scilla nutans*. Page 74. ^{tus. facing one way}

Harebell Hyacinth. Woods, &c. P. 5. Curt. 139. ^{leaves flattened and keeled. Scape - 13 in high}

422. ANTHER'ICUM. Cor. 6-petalled, spreading. Caps. ovate.

1. A. Leaves flattish, scape 1 (-4) -flowered. ^{serotinum. leaves 2 thick} (Upper bractes decurrent, inflected.) ^{seminous - stem 6 inches}

Mountain Saffron. Mountains. P. 6. Ray 17. 1. Root subscap, stem

2. A. Leaves ensiform, filaments woolly. See *ossifragum*. ^{flowers loosely} *Narthecium ossifragum*. ^{peduncles alternate} ^{gum. Scape - 10 in}

3. A. Leaves ensiform, perianth 3-lobed, filam. ^{calycula-} smooth, flow. trigynous. See *Tofieldia pa-* ^{tum.} *lustris*. Page 78.

— NARTHE'Cium. Cor. 6-petalled, permanent. Style o. Caps. ovate. Seeds acuminate at both ends. WITH.

1. NARTHECIUM. See Hudson. ^{ossifragum.} *Lancashire Asphodel*. Bogs. P. 7. 8. F. Dan. 42.

418. ORNITHOG'ALUM. Cor. 6-petalled, erect, permanent, above the middle spreading. Filaments every other dilated at the base.

1. All the stamens subulate.

1. O. Scape angular, 2-leaved, peduncles umbel-^{late, simple.} ^{bulb small - stem 6 inches} ^{radical leaves single} *Yellow Bethlem-Star*. Sandy pl. P. 3. 4. E. Bot. 21. ^{stem leaves 2 unequal pairs}

2. O. Raceme very long, filam. lanceolate, peduncles, when in flower, spreading, equal; when in fruit, approaching the scape. ^{pyrena-} ^{cum. Bulb ovate leaves} ^{over long entire scape}

Spiked Beth-Star. Meadows, &c. P. 6. Ger. 97. ^{3 feet flowers white, green} ^{half yellow within.}

Scap. 8 inches

Outer umbell'd umbella'-
leaves linear tum.

Stamens at the tip
flowers spreading, white.

2. The alternate stamens emarginate.

3. O. Flowers corymbose, pedunc. higher than the
scape. (Outer pedunc. taller than the central
ones. WITH.)

Com. Bethlem-Star. Woods, &c. P. 4. 5. E. Bot. 130.

419. SCIL'IA. Cor. 6-petalled, spreading, deci-
duous. Filam. filiform. Stamens, blue

flow. bluish purple, appear before the leaves
Root terminated, autumnal-
note some twice lis.

along as the leaves, upright

bifolia? 2. S. Fl. somewhat erect, few. (Root solid, flow.
nearly erect, bracteless; leaves lanceolate, gen-
erally 2. E. Bot. linear

bulb. into inner obtuse
slightly keeled. flowers 4 to 10
the mostly pointing one way
rather brownish
verna.

flowers 3 to 6 blue
lanceolate, as long as the
peduncles
nutans.

flowers, pair of one way
inner sharp, deep green
flowers 8 or 10 silvery white

1. S. Leaves linear, flowers corymbose, pedunc.
naked, ascending, as long as the flower.

Autumnal Squill. Dry pastures. P. 8. 9. E. Bot. 78.

2. S. Fl. somewhat erect, few. (Root solid, flow.
nearly erect, bracteless; leaves lanceolate, gen-
erally 2. E. Bot. linear

Two-leaved Squill. P. Buddle's Herbar. E. Bot. 24.

3. S. Corymb hemispherical, few-flowered, bracteate
(bractes lanceolate, obtuse); leaves subulato-
linear, channelled. 2 HUDS. WITH. E. Bot.
S. bifolia. Lightf.

Vernal S. Rocks on the coast of Wales. P. 4. E. B. 23.

4. S. Root solid, spike nodding, flow. pendent, cam-
panulate, somewhat cylindrical, petals reflected
at the points, bractes in pairs, acute; leaves
flaccid. E. Bot. Hyacinthus non scriptus. Lin.
&c. See Page 73.

424. ASPAR'AGUS. Cor. 6-parted, (6-petalled)
erect, 3 inner petals reflected at the top.
Berry 3-celled, 2-seeded.

Cultivated in officinalis. 1. A. Stem herbaceous, cylindrical, (nearly) erect,
leaves setaceous, stipules (solitary, or) in pairs.
Gardens - Young shoots are
delectable, and communicate
a violet scent to the urine

Com. Asparagus. Sea coast. P. 7. E. Bot. 339.

411. FRITILLA'RIA. Cor. 6-petalled, campanu-
late, with a nectariferous cavity above each
claw. Stam. as long as the corol. (Stigma
3-cleft. Caps. 3-celled.)

leaves linear mecal'gris. 1. F. All the leaves alternate, stem 1- (or 2) flowered.
channelled - stem 10 inches
upright smooth leafy

Fritillary. Meadows, &c. P. 4. 5. Curt. 218.

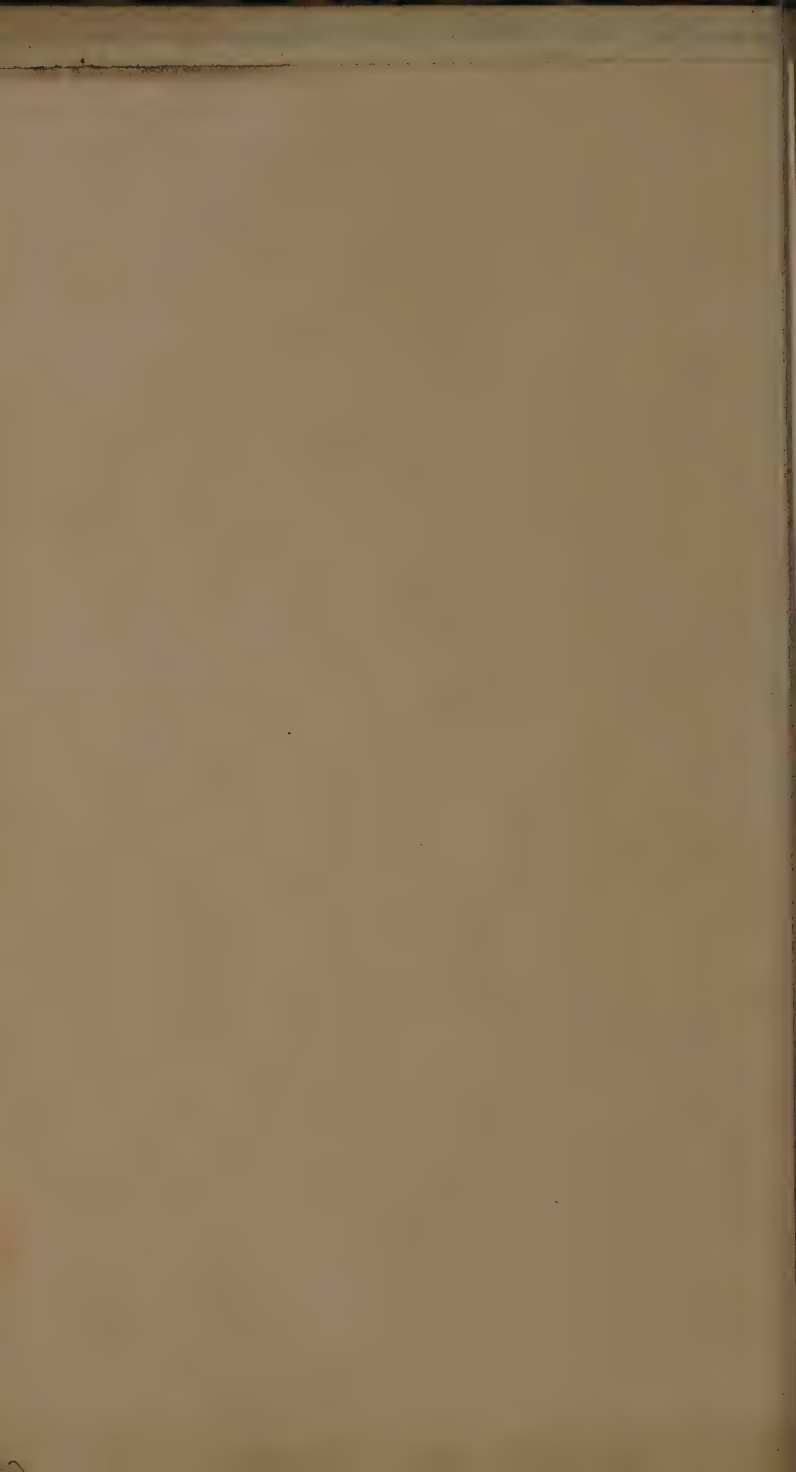
415. TU'LIPA. Cor. 6-petalled, campanulate.
Style o. (Caps. 3-celled.)

petals lanceolate silver'tris. 1. T. Flower somewhat nodding, leaves lanceolate.
bearded at tip - Stamens
hairy at bottom - stem upright 2 inches - leaves glaucous
flowers yellow

Wild Tulip. Chalk pits in Suffolk. P. 4. E. Bot. 63.

Paragon: ramosum — I examined several good speci-
July 1st — mens, but did not appear that the specimens
were in pairs as described by Prof. Nees. They were
unilocular and uniovulate the ovule being
suspended.

July 3 — Some that were further advanced had the seed
of a stony hardness —



434. ACORUS. Spadix cylindrical, covered with florets. Cor. 6-petalled, naked. Style o. Caps. 3-celled.

1. ACORUS. *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
437. JUN'CUS. Cal. 6-leaved. Cor. o. Caps. 1- (or 3) celled.

1. Culms naked.

1. J. Leaves and flowers 3 (1-4), terminating. trifidus. *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
2. J. Culm stiff and straight, head lateral. (Florets conglomerate, ovate, obtuse, triandrous.) - *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
3. J. Culm stiff and straight, panicle lateral (florets triandrous). - *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
4. J. Culm (stiff, striated, glaucous) crooked, membranous at the point, panicle lateral. J. effusus. *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
- Hard Rush. Pastures, &c. P. 7. Leers 13. 3.
5. J. Culm filiform, nodding, panicle lateral (few-flowered). - *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
- Turfy bogs on mountains. P. 8. Leers 13. 4.
6. J. Leaves setaceous (rigid, spreading), heads glomerate, leafless. - *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
- Moss Rush. Turfy bogs. P. 6. 7. F. Dan. 430.
7. J. Culm nearly naked, cylindrical, mucronate, panicle terminating, involucre two-leaved, thorny. - *Acet glumaceus* - leaves 2 or 3 in. cal'amus. - radii from the Sweet Flag. River-banks. P. 5-7. E. Bot. 356. side of the leaf 3 inches long covered with florets in a spiral line - leaves 3 or 4 feet long
- Pricking Large Sea R. Sea c. P. 7. 8. Park. 1193. 4.
- Var. 2. Pan. not spreading, 3-6 inch. long, branches 2 principal, one 3-6 inch. long, the other short, branched. See With. vol. ii. p. 347.
- Sea Hard Rush. Marshes. P. 7. 8. Park. 1193. 7.

2. Culms leafy. (J. squarrosus.)

8. Leaves with knotlike joints (partitioned transversely), petals obtuse.
- Var. 1. *aquaticus* L. J. *Compressus*. Relh. and Sibth. Leaves compressed. Ger. 22. 9.
- 2. *sylvaticus* B. Lin. J. *nemorosus*. Sibth. Leaves cylindrical. E. Bot. 238.
- 3. *uliginosus*. Sibth. Leaves setaceous, caps. smaller. H. ox. viii. 9. 2. 3.
- Jointed Rush. Var. 1. 2. Wet woods, &c. Var. 3. Wet sandy commons, P. 6-8.

- uliginosus*. 9. J. Culms procumbent, proliferous from the head of flowers, leaves setaceous, somewhat knotted (transversely partitioned). WITH. GMELIN.
Obs. The partitions of the leaves, according to With., are in some specimens just observable, in others not at all; the former he has always considered as a var. of *J. articulatus*, the latter was supposed to be a viviparous var. of *J. bulbosus*. See vol. ii. p. 348. *F. Dan.* 817. *H. ex.* viii. 9. 4.
- bulbosus*. 10. J. Leaves linear, channelled, caps. obtuse. (Culm rather compressed, undivided, panicle terminating, shorter than the bracte.)
Bulbous Rush. Wet heaths. P. 7. 8. *F. Dan.* 431.
- bulbosus*. 11. J. Culm dichotomous, leaves angular, flowers solitary, sessile. (Calyx-leaves lanceolate, acuminate, caps. ovate, shorter than the calyx. WITH.)
Toad Rush. Wet sandy past. P. 5—8. *Leers* 13. 8.
- biglumis*. 12. J. Leaf subulate, glume 2-flowered, terminating. (Outer leaf of the glume much larger, with a long point.)
Two-flowered Rush. Bogs on M. P. 8. *F. Dan.* 120.
- triglumis*. 13. J. Leaves flat, glume 3 (2—4)-flowered, terminating.
Three-fl. R. Bogs on Mount. P. 6. 8. *Lightf.* 9. 2.
- pilosus*. 14. J. Leaves flat, hairy, corymb branching. (Fl. solitary. HUDS.) *Hairy Rush.* Woods. P. 4. 5. *Curt.* 345.
- maximus*. 15. J. Leaves flat, hairy, panicle terminating, very much branched, flowers 1, 2, or 3 together.
 WITH: *J. sylvaticus.* HUDS. *Curt.*
Wood Rush. Woods, &c. P. 5. 6. *Curt.* 344.
- campestris*. 16. J. Leaves flat, somewhat hairy, spikes sessile, and peduncled.
Field Rush. Pastures, &c. P. 4. 5. *Curt.* 140.
 Var. 2. Panicle larger, more compact, spikes glo-
 bular, straw and leaves as long again. RAY. 416. 2.
 A distinct species? Turfy bogs. P. 6. Gerard 16. 1.
- spicatus*. 17. J. Leaves flat, spike racemous, nodding.
Spiked Rush. Highl. Mount. P. 7. 8. *F. Dan.* 270.
- Jacquinii*. 18. J. Leaf subulate, head terminating, about 4-flowered. — See Symons.
 — Scotland. DICKSON. *Jacq. Austr.* 221.
446. PEP' LIS. Perianth campanulate, mouth 2-cleft. Petals fixed to the calyx. Caps. 2-celled.
1. P. Flowers apetalous. (Pet. very minute, deciduous.) *Sten. prostrata, simple*
 — Watery places. A. 7—9. *Curt.* 288.

Colchicum autumnale. Root violently emetic & purgative in the Spring & in Autumn. Reported a specific in Gout, but requires caution.

HEXANDRIA. TRIGYNIA. *Colchicum*.

77

There is a white & green variety

TRIGYNIA. Bulb ovate, one or two new ones arising from beneath the fibres of the old plant in whose

457. *COL'CHICUM*. A Spathe. Cor. 6-parted, they are partly lodged tube from the root. Caps. 3, connected, inflated. Flowers purple 2 to 6 and appearing long before the leaves have come.

1. C. Leaves flat, lanceolate, erect. *perianth 6 parted - sometimes autumnale. inserted at the top of the tube some others 9 inches*
Meadow Saffron. Meadows. P. 8. 9. Mart. 60. *Plentiful in Warwickshire*

458. *TRIC'LOCHIN*. Cal. 3-leaved. Pet. 3, like the calyx. Style o. Caps. opening at the base. Root fibres thickened at upper part as if

1. T. Capsules 3-celled, nearly linear. *palus'tre. bulbous*
Arrow-headed Grass. Mead. P. 7. 8. E. Bot. 366. *scape round leaves*

2. T. Capsules 6-celled, ovate. *marit' in semisylva*
Sea Arrow Gr. Salt marshes. P. 7. 8. E. Bot. 255. *mum.*

451. *RU'MEX*. Cal. 3-leaved. Pet. 3, converging. Seed 1, triangular (inclosed in the corol). Root periform. Herb acid *leaves broader & more fleshy than palustris*

Obs. Lin. has only given 3 divisions of this genus, viz.

1. Hermaphrodite, valves marked with a granule. *Sanguineus, crispus, acutus, maritimus, obtusifolius, pulcher.*

2. Hermaph., valves without a granule. *Digynus.*

3. Flowers dioicous. *Acetosella, Acetosella.*

The distribution here employed is from Withering.

1. Hermaph., petals entire, only 1-beaded.

1. R. Valves very entire, leaves cordato-lanceolate. *sanguineus - leaves leaves*
(Leaves with red veins.) *heart-shaped - upper us. lanceolate*
Small-grained Dock Bloodwort. B. 7. Pet. 2. 5. *valves colored leaves purple seeds arboresc.*

2. Hermaph. petals entire, all of them beaded.

2. R. Leaves lanceolate, undulated, acute. (Valves *crispus*. Root glaucous strongly veined. WITH.) *stem angular racemes closely beaded*
Curled Dock. Road sides, &c. P. 6. 7. Curt. 104. *at bottom*

3. R. Valves toothed, leaves cordato-oblong, acute. *acutus*. minate. (Valves veinless (not toothed); Root *deeper diff. shaded from straw to olive green* leaves ovali-lanceolate, uneven at the edges. WITH.)

Woods, &c. P. 6. 7. Curt. 181.

4. R. Leaves cordato-lanceolate, rather acute; flow. *paludosus*, in distinct verticils. HUDS. (Vertic. be- *shells distinct fleshy* neath the bracte. WITH.) *stem rough - radical leaves*

Marsh Dock. Marshes. P. 8. Munt. 194. *large white*

Is it a var. of *R. acutus*? See With.

5. R. Leaves lanceolate, acute. HUDS. (Smooth *Hydrola*. Root thick very entire, tapering at the base. WITH.) *p'athum. stem 5 feet*

Water Dock. Wet ditches. P. 7. 8. Pet. 2. 1. *whirls near together*

Root antiscorbutic and useful in chronic diseases from obstructions in the viscera, also a good tooth powder.

Wort

(Meadow Sweet. *Rumex acetosa*) - Root dried gives a beautiful red colour to water, as it changes to wine, leaves are used in salads and sauces - & prepared juice cleared by settling and evaporating yields an essential salt sold for salt of lemon and used 78

HEXANDRIA. TRIGYNIA. Rumex.

- Obs. With. suspects that this plant and *R. aquaticus* Lin. are the same, notwithstanding that it is characterized as being without beads, and the leaves cordate; for in *Hydrolap* the beads are not very obvious in the flowering state, though they become conspicuous when the seed is ripe.
3. Flow. Hermaph., petals toothed, only 1-beaded.
- Leaves sweet pul'cher. 6. R. Root-leaves panduriform. upper leaves oblong
Racemes leafy - Fiddle Dock. Rubbish. P. 7. 8. H. ox. v. 27. 13.
Stem procumbent
4. Hermaph., petals toothed, all beaded.
- marit'imus. 7. R. Leaves linear (fl. in distant verticils. W.).
— Road sides. P. 7. 9. Curt. 163.
- au'reus. 8. R. Leaves linear, verticils crowded, spike-like.
WITH. *R. maritimus* β. Huds.
Stem furnished with flowers golden yellow Golden Dock. Marshes. P. 7. 8. Pet. 2. 8.
- obtusifo- 9. R. Leaves cordato-oblong, rather obtuse, finely
luis. crenate.
Racemes leafy - Broad-leaved Dock. Rubbish. P. 7. 8. Curt. 168.
Leaves radical leaves
any grateful to deer
5. Hermaph., petals without beads.
- Stem 1 foot dig'ynus. 10. R. Flowers digynous, leaves round & wrinkled
leaves pale green, ribbed Mountain Dock. Mountains. P. 5—7. F. Dan. 14.
Round leaved Welsh onion
6. Flowers dioicous.
- Root fibrous Aseto'sa. 11. R. Leaves oblong, sagittate. Stem leafy 3 feet
creeping flowers in half Com. Sorrell. Meadows, &c. P. 6. E. Bot. 127.
whirls
- Acetosell- 12. R. Leaves lanceolato-hastate.
Stem 12 inches la. Sheep's-Sorrell. Sandy pastures. P. 5. 6. Ger. 397. 3.
- radical leaves hastate
Stem leaves lanceolate — TOFIELDIA. Cal. o. Cor. 6-petalled. Caps.
3-celled, 6-valved. WITH. See Hudson.
- palus'tris. 1. TOFIELDIA. HUDS. WITH. Anthericum caly-
culatum. Lin. See page 73.
Scotch Asphodel. Bogs on Mount. P. 7—9. Ger. 96.

POLYGYNIA.

460. ALIS'MA. Cal. 3-leaved. Pet. 3. Seeds many.
- Plantago. 1. A. Leaves ovate, acute, fruit obtusely 3-cor-
nered.
Stems umbellated
branched branches Water Plantain. Ditches, &c. P. 7. 8. Curt. 318.
3 verticillate
flowers bluish white
leaf 4 but big 3 sided upright
Fibers farinaceous, much recommended in Hydrophobia
Useful for tying up milk in breasts
- Var. 2. Fine-leaved. DILL. in Ray syn. 258. 7.
Huds.

2. A. Leaves cordato-oblong. Pist. 6. Caps. subulate. *Scape 9 inches verticillate, umbelliferous. In umbels*
Star-headed Thrumwort. Ditches. P. 6. 8. Curt.
3. A. Leaves ovate, obtuse, pedunc. solitary. *na'tans. Herb floating*
 (Leaves gramineous and ovate, stem creeping, *peduncles opposite to the*
 umbel few-flowered. ZINN. fl. gœt. 112. *Leaves & flowered flowers*
 Caps. generally 8. Flow. several from the *white.*
 spathe. Lin. Submersed leaves linear, float-
 ing, ovate. HUDS.)
Creeping Th. Lakes. P. 7. Vail. Mem. 29. t. 4. f. 8.
4. A. Leaves lineari-lanceolate, fruit globular, *ranuncu-* *scape 12 in*
 squarrose. *5 seeded peduncles simple white lob'des. upright*
Less Th. Turfy bogs, &c. P. 6—9. E. Bot. 326. Flowers pale purple
5. A. Leaves lanceolate, fruit 3-cornered. *A. lanceolata.*
plantago β. Huds.
 — Ditches, &c. Gerard. 337. 2.

220-36

CLASS VII.

HEPTANDRIA.

MONOGYNIA.

461. TRIENTA'LIS. Cal. 7-leaved. Cor. 7-part-
ed, (segm.) equal, flat. Berry 1-celled,
dry.

europæa. 1. T. Leaves lanceolate, very entire.
Chickweed Winter Green. Woods in Yorksh. &c. P.
5—7. *E. Bot.* 15.

Obs. 1. The specific char. of *Trientalis* is now superfluous,
this being the only known species, since the *T. capensis* Sp.
Pl. ed. 1. has been made a separate genus by the name of
Septas.

Obs. 2. The number of the stam. is very inconstant. See *E.*
Bot. P. 15.

Dur 36

CLASS VIII.

OCTANDRIA.

MONOGYNIA.

1. Flowers complete.

471. *EPILOBIUM*. Cor. 4-petalled. Cal. 4-leaved (4-parted); superior. Caps. 4-celled. Seeds pappous.
483. *VACCINIUM*. Cor. 1-petalled. Cal. 4-toothed, superior. Filam. on the receptacle (Anthers awned in the middle). A Berry.
1258. *CHLO'RA*. Cor. 8-cleft. Cal. 8-leaved, inferior. Caps. 1-celled, 2-valved, many-seeded.
484. *ERI'CA*. Cor. 1-petalled. Cal. 4-leaved, inferior. Filam. on the receptacle. A Capsule.

(X. *Andromeda Daboccia*. *Monotropa Hypopitys*. XXII. *Populus*. XXIII. *Acer*.)

2. Flowers incomplete.

485. *DAPH'NE*. Cal. 4-cleft, corol-like, equal. Stam. inclosed. Berry pulpy.

(XXII. *Salix pentandra*.)

DIGYNIA.

(VIII. *Chlora perfoliata*. *Polygonum pensylvanicum*, *Chrysosplenium*. X. *Scleranthus*. XXI. *Quercus*. *Corylus*.)

Epilobium angustifolium - Stalks of the root salable
 Herb is superior fermentible and interesting down
 at the bottom of the root may be manufactured



OCTANDRIA.

Root of *Polyg. Bistorta*

TRIGYNIA.

495. *POLY'GONUM*. Cor. o. Cal. 5-parted. Seed
 1, naked.

(XXI. *Quercus*.)

TETRAGYNIA.

PAR'IS. Cor. 4-petalled, subulate. Cal. 4-
 leaved. Berry 4-celled.

501. *ADOX'A*. Cor. 4 or 5-cleft, superior. Cal. 2-
 leaved. Berry 4 or 5-seeded.

502. *ELAT'INE*. Cor. 4-petalled. Cal. 4-leaved.
 Caps. 4-celled.

(XXI. *Myriophyllum*. *Quercus*. XXII. *Rhodiola*.)

MONOGYNIA.

471. *EPILO'BIUM*. Cal. 4-cleft. Petals 4. Caps.
 oblong (very long), inferior. Seeds pappous.

1. Stamens declined.

Root erect angustifo- 1. E. Leaves scattered, lineari-lanceolate, flowers
 them 3 feet lium. unequal. Spiked large reddish

upright branched above Rosebay Willow-herb. Hedges. P. 6-8. Curt. 106.
 flowers alternate purple 2. Stamens erect, regular, petals bifid.

Root creeping hirsu'tum. 2. E. Leaves opposite, lanceolate, serrated, decur-
 rent, and embracing the stem. (Leaves ovato-
 lanceolate, hairy. Stem very much branched,
 hairy. WITH.) E. ramosum. Huds.

Large-flow. Willow-herb. Hedges. P. 7. Curt. 117.
 Root fibrous parvisflo- 3. E. Leaves lanceolate, pubescent, nearly sessile,
 stem hairy, unbranched. WITH. E. hirsutum
 B. Lin. E. hirsutum. Huds. E. villosum. CURT.

Woolly Willow-herb. Sides of ditches. P. 7. 8. Curt.
 Stem mostly single mont' num. 4. E. Leaves opposite, ovate, toothed. (Upper ones
 alternate, stem cylindrical). Smooth-leaved Willow-herb. Woods. P. 7. Curt. 195.

Var. 2. Leaves 3, and 4 at a joint.

tetrago'. 5. E. Leaves lanceolate, finely toothed, the lowest
 num. opposite; stem 4-cornered. (Stigma very en-
 tire. WILLICH. Obs. 69.)

Square-stalked W. Marshes. P. 7. Curt. 131.

Epilobium hirsutum - Roots, when quite fresh gathered
 have a transitory fragrance, resembling scalded codlings
 which vanishes in a few minutes

6. E. Leaves opposite, lanceolate, very entire, pet-
tals emarginate, stem erect. *var. pauciflora* - *half climbing*
Marsh Willow-herb. Bogs, &c. P. 7. E. Bot. 346.
7. E. Leaves opposite, ovato-lanceolate, very en-
tire, siliques (capsules) sessile, stem creeping
(about 3-flowered). *Style about half*
Alpine Wil. Alpine rivulets. P. 8. F. Dan. 322. *Root-creeper*
stem 4 in. & 5 in.
simple
Fl. very small
8. E. Leaves (lower) opposite, or (upper mostly) *ro'seum.*
alternate, ovato-lanceolate, petioled, serrated,
smooth. SCHREBER. (Stigma undivided,
club-shaped. S.)
— Lambeth Marsh. CURTIS. Near Ongar.
FORSTER. See Symons. P. 109.

483. VACCINIUM. Cal. superior. Cor. 1 petalled. Fil. inserted in the receptacle. Berry 4-celled, many-seeded.

1. *Leaves annual, or deciduous.*

1. V. Peduncles 1-flowered, leaves serrated; o- Myrtillus. *ovules bell-*
vate, stem angular. (Berry generally 5-cell- *shaped 4- cell flesh colour*
ed, stamens 10, inserted in the germen. *anthers two horizontal laminae*
SCHKUR.) *woolly - leaves light green - berries black - Excellent*
Bilberry. Heaths, &c. S. 4-5. E. Bot. 456. *stem angular*
2. V. Peduncles 1-flowered; leaves very entire, uligino'- *herb campanulate*
obovate, obtuse, smooth (ciliate at the base *sum. 4 cell - anthers 2 horizontal*
when young, highest leaves sometimes of a *flowers flesh colour*
pleasant red. PERS.). *stem curved* *berries black - Excellent*
Great Bil. Woods. S. 4.5. F. D. 231. Ger. 1416.6.

2. *Leaves evergreen.*

3. V. Racemes terminating, nodding, leaves ob-*Vitis idæa*. *Caulis* bell-shaped
ovate, revolute, very entire, dotted under-*4 or 5 parted, filaments*
neath. *anthers awl-shaped, anthers 2 parted, filaments flesh col.*
Red Whortle-berries. Heaths, S. 4. 5. F. Dan. 40. *drooping. Stem low*
leaves thin, glaucous, berries red, equal, unpleasantly taste-barked]
4. V. Leaves very entire, ovate, revolute, stems *Oxycoccus*.
creeping, filiform, naked. *Stem bell-shaped 4 parted, anthers awl-*
Cranberry. Peaty bogs. S. 5—6. E. Bot. 319. *Stem three-angled, nodes*
creeping. Flowers flesh col.
Obs. It is referred to the genus *Scollera* by Roth on ac-
count of the corols being 4-petalled, revolute, the fila-
ments converging, and the anthers tubular, 2-parted.

1258. *CHLO'RA*. *Cal.* 8-leaved. *Cor.* 1-petalled
(6 or) 8-cleft. *Caps.* 1-celled, 2-valved,
many-seeded. (*Stigma* 4-cleft. E. BOT.)

1. C. Leaves perfoliate. *perfoliata*.
Perforated Yellow-wort. Marly g. A.6—9. E.B.60.

484. ERICA. Cal. 4-leaved. Cor. 4-cleft. Filam. fixed on the receptacle. Anth. bifid (and perforated at the top). Caps. 4-celled.

Obs. In the Syst. Veget. the British species of Erica are divided in the following manner, viz.

1. Anthers awned. A. Leaves compound. Vulgaris. B. Leaves 4 together: Tetralix.
2. Anthers crested, leaves 3 together. Cinerea.
3. Anthers awnless, projecting; leaves 4, or more together: Vagans.

The arrangement followed here is from Withering.

1. Anthers simple, awnless; leaves alternate.

Stem under shrubby. Daboecia. 1. E. Leaves tomentous underneath. LIN. SH. HUDS. E. BOR. E. Daboecia. With. Andromeda Daboecia. Lin. Syst. Veg. Irish Heath. Mount. of Mayo. S. 6. 7. E. Bot. 35. Obs. It has the habit (and anthers) of Andromeda with the numbers of Erica.

2. Anthers awnless, leaves 4 together.

Anthers awnless, vagans. 2. E. Anthers and style projecting, corol campanulate, flow. solitary, leaves 4 together, Cornish Heath. Heaths. P. 6—8. E. Bot. 3. Anthers with 2 smooth awns at the base; leaves 4 together.

Tetralix. 3. E. Anthers awned, cor. ovate, including the style, leaves 4 together, ciliate, flow. capitate, (Leaves oblong, ciliate, tomentous underneath, flow. umbellate, calyxes ciliate, tomentous. WITH.) Cross-leaved Heath. Moist heaths. P. 7. Curt.

4. Anth. with 2 dentato-serrated awns at the base, leaves opposite.

Vulgaris. 4. E. Corols campanulate, nearly equal, calyxes double, leaves opposite, sagittate. Common Heath. Heaths. S. 7. 8. Curt. 297. Anth. with 2 dentato-serrated awns at the base, leaves 3 together.

5. E. Cor. ovate, style somewhat projecting, leaves 3 together, stigma capitate. (Leaves lanceolate, entire, smooth, flow. umbellate, ovate, calyxes finely serrated, branches woolly. WITH.) Fine-leaved Heath. Dry heaths, S. 6—8. Curt.

Leaves triangular, cinerea. 5. E. Cor. ovate, style somewhat projecting, leaves 3 together, stigma capitate. (Leaves lanceolate, entire, smooth, flow. umbellate, ovate, calyxes finely serrated, branches woolly. WITH.) Fine-leaved Heath. Dry heaths, S. 6—8. Curt.

Erica vulgaris - Young tops brewed along with half as much malt into a good beer. - Decortication cans leather and dyes almond wood, plum honey, where it abounds, has a reddish cast. The plant is used for building small cottages, for thatching, for making ropes, for brooms, for firing, for filling drains, and for beds, being confined in a frame with the flowering tops uppermost.

Daphne hexagona - Drupe coriaceous 8. If killed a young woman immediately; bark of the root 2 drams boiled in three pints of water to two and taken daily resolves menstrual nodus. *When changed it causes baby of the Tongue*

OCTANDRIA, MONOGYNIA, Daphne

485. DAPHNE. Cal. (generally) o. Cor. 4-cleft, (funnel-shaped) shrivelling including the stamens. Berry 1-seeded.

1. Flowers lateral.

1. D. Flowers sessile, 3 together, on the stem, Mezer'eum. *Stems shrubby leaves lanceolate, deciduous. — naked at bottom. Flowers in the axils Mezer'eum. Woods. S. 2. 3. F. Dan. 268. Leaves appearing after flower.*
2. D. Racemes axillary, 5-flowered, leaves lanceo- Laure'ola. *late, smooth. Stem about 3 feet high, leafy at top, branches few. Laurel Mezer'eum. Woods. S. 3—4. E. Bot. 119. Leaves drooping, pale green. Flowers green, double-limb.*

2. Flowers terminating.

3. D. Flow. fasciculate, terminating, sessile, leaves Cne'otum. lanceolate, naked, mucronate. See Symonis. — Lake near Snowdon. Jacq. Austr. 426.

TRIGYNIA.

495. POLYANDRUM. Cal. o. Cor. 5-parted, calyx-like. Seed 1, (angular, invested with the corol).

1. Persicariæ, pistil bifid, or stam. fewer than 8.

1. P. Fl. pentandrous, semidigynous, spike ovate. amphib'ium.

Var. 1. aquaticum. Stem creeping, leaves floating, oblongo-lanceolate, shining, stam. shorter than the corol. *Corolla reddish.*

Nar.-leav. Pondweed. Ditches. P. 6. 7. E. B. 436.

Var. 2. terrestre. Stem erect, leaves acuminate, rough, stam. longer than, or as long as, the corol.

Amphib. Snakeweed. Cult. ground. P. 9. Curt. 223.

2. P. Fl. hexandrous, semidigynous, leaves lanceo- late, stipules nearly awnless (slightly ciliate, spikes cernuous). *Hydroph. leaves pubes per. stipules fringed. Stem 10 spikes red-dish. — Plant acid like Hippoc.*

Water-pepper. Watery places. A. 7—9. Curtis.

3. P. Fl. hexandrous, pist. slightly bifid (sometimes 3-cleft), leaves linear-lanceolate, stem creeping at the base. See Curtis.

— Moist meadows, A. 9. Curt.

4. P. Fl. hexandrous, digynous, spikes ovato-ob- long, leaves lanceolate, stipules ciliate. *Persica- ria.*

Spotted Snakeweed. Ditches, &c. A. 7—9. Curt.

5. P. Fl. hexandrous, digynous; stipules not cili- pallidum.

Daphne laureola Bark of the root useful in rheumatic twinges and worms; 10 grains is a bark and some purge for a strong adult; this and the whole plant is very acrimonious.

Polygon bistorta - Young shoots eaten as a pot-herb, root very
 Carthagin used also in tanning leather
See Home of Root Page 82

ate; peduncles rough with glands; seeds de-
 pressed on each side. CURT. P. *Persicaria* 7.
 Huds. *bisbortia* 1. *sp. 10001111*

Pale-flowered Snakew. Dunghills, &c. A. 8. Curtis.

Var. 2. Stem and flow. red, like the preceding in
 every other respect. CURT.

— 3. Flea-bitten, stem spotted with red. CURT.
 8. Huds. Dill. in Ray syn. 146.

— 4. Leaf hoary underneath. DILL. ib. 145.
 Pet. 3. 8.

2. *Bistorta*, spike single.

6. P. Stem undivided, leaves ovate, decurrent along
 the petiole.

Great *Bistort*. Moist meadows, P. 5. 6. Curtis.

viviparum. 7. P. Stem undivided, leaves lanceolate. (Spike
 loose, 3-cornered; seeds round. OESTERR.

Lower flow. of the spike frequently passing in-
 to viviparous bulbs.)

Small *Bistort*. Mount. pastures. P. 6. F. Dan. 13.

Var. 2. β . Huds. Very small, lower leaves round-
 ish, minutely serrated. Ray syn. 147. 3.

3. *Polygona*, leaves undivided, flow. octandrous
 (stem branched. WITH.).

8. P. Fl. octandrous, trigynous, axillary, leaves lan-
 ceolate, stem procumbent, herbaceous.

Var. 1. *latifolium*. α . Lin. Huds. V. 1. With.
 Knot-grass Snakeweed. A. 6—9. Curt. 1. 10.

— 2. *brevifolium*. β . Lin. Huds. 2. With.
 Leaves oblong. Stam. 7. Pet. 10. 3.

— 3. *angustifolium*. γ . Lin. Huds. 3. With.
 Leaves linear. Pet. 10. 3.

— 4. δ . Huds. Leaves round. Pet. 10. 2.

9. P. Flow. octandrous, trigynous, axillary (4 to-
 gether) leaves ovali-lanceolate, evergreen, some-
 what shrubby. P. *aviculare*. Huds. Var. 5.

With.

Sea Knot-grass. Sea coast. P. 7—8. Pet. 10. 5.

4. *Helxine*, leaves somewhat cordate.

10. P. Leaves cordato-sagittate, stem somewhat erect,
 unarmed, angles of the seeds equal.

Buck-wheat. Cornfields. A. 7. 8. Mart. 46.

11. P. Leaves cordate, stem twining, angular, flowers
 blunted.

Black Bindweed. Cornfields. A. 6—9. Curt. 253.

Obs. Dr. Withering has divided the species of *Polygonum* in
 the following manner:

Polygonum aviculare - Herb given to sick hounds that refuse the
 meat; seeds may be ground into a good flour for cakes, and are
 the principal food of small birds, when wild

Stem 18 inches high
 Leaves beneath flowers
 Leaves veined - Spike many flowered
 viviparum.
 Root fibrous - *aviculare*.
 Stem procumbent - *latifolium*.
 Leaves alternate - Stem
 divaricated knotted at joints.
 Flowers pink.

Stem 1 foot short
 Leaves fleshy, the upper
 sessile, flowers
 smilish white

Convul-
 vulus.

SUBSTITUTE FOR COCHINEAL.

IN the steppes of the Ukraine there grows in great quantities a plant, named *polygoum minus*, which is gathered at the end of July ; it is torn up by the roots, which contain a species of maggot, or insect, of an oval shape, and which hardens by being exposed to the air.

They are put into a certain quantity of water, with the addition of a little alum ; and this water becomes, after a short time, of a most beautiful scarlet colour. The Cossack women, who sell it to the Russian merchants, dye their thread with it, and likewise use it to paint themselves. The Polish Jews and the Armenians sell a great deal of it to the Turks, who use it to dye their silks, to leather, and

The Russians divide the large air bladders of the sturgeon lengthwise, and wash them in very weak lime-water. They strip off the fine membrane or skin which covers these bladders, and wrap them up in wet linen, and bruise them and wet them till they become soft as paste. They then spread them out, afterwards roll them together, and bend the roll into the form of a heart, the two ends being fastened together by means of a wooden peg. These rolls are then suspended in the air to dry, and when dry are fit for use. The Russians, however, do not limit themselves to the swimming bladders of the sturgeon, but employ almost all the membranes and cartilaginous parts of several other fish; and it seems certain that Isinglass may be procured from almost all kinds of fish which live in salt

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Puis quadrifolia - leaves & berries narcotic - 2 roots
Emetia in doses of two scruples

OCTANDRIA. TRIGYNIA. Polygonum.

87

1. Stem herbaceous, flow. with 5 stamens. *Amphibium*.
2. Flow. with 6 stam., caps. 1-celled. *Hydropiper*, minus, *Persicaria*, *pallidum*.
3. Flow. with 8 stam! and 3 pistils, spike single, stem undivided. *Bistorta*, *viviparum*.
4. Flow. with 8 stamens and 3 pistils, spike single, stem branched. *Aviculare*.
5. Leave somewhat cordate. *Fagopyrum*, *Convolvulus*.

TETRAGYNIA.

500. PAR'IS. Cal. 4-leaved. Pet. 4, narrower. *Stem* greenish purple
Berry 4-celled. *Stem* ^{leaves} *rubbed verticillate about*
1. P. Stem-leaves generally 4 (3-7). *quadrifo-* the middle
Herb Paris. Woods. P. 5. 6. -E. Bot. 7. *lia. often*
501. ADOX'A. Cal. bifid, inferior. Cor. 4 or 5-
cleft, superior. Berry (Caps.) 4 or 5-
celled, united with the calyx.
1. ADOXA. (Lateral fl. 5-cleft, stam. 10, pist. 5.) *moschatel* - *Stem*
Tuberous Moschatel. Woods. P. 4. 5. Curt. 137. *lina. testacea?*
leaves alternate *scape leaves* *2 opposite* *dark green*
502. ELAT'INE. Cal. 4-leaved. Pet. 4. Caps. *Flowers greenish*
4-celled, 4-valved, depressed.
1. E. Leaves verticillate. - *Stem* *rooting, branched* *Alsinas* - *Stem* *ball*
Waterwort. Ditches. P. 8. Vaill. 1. 6. *fls. and frum.* *Stem 1 inch*

Polygonum fagopyrum Buckwheat
Cultivated for the seeds, also a green crop to plough
in for manure, and to attract game to the place
sometimes wild by the roadside, but does not bear our
winters well. - seeds nutritious, make good crumpets,
used also to feed poultry

herbaceous, flow. with 4 stamens. Anthers
with 8 rays. caps. 1-celled. Hydrifera, water.

CLASS IX.

ENNEANDRIA.

STANDARIA

DIGYNIA.

(XXI. *Quercus*. XXII. *Mercurialis*.)

HEXAGYNIA.

(XXII. *Hydrocharis Morsus ranae*.)

507. BUTOMUS. Cal. 0. (Involucre simple, 3-leaved.) Cor. 6-petalled. Caps. 6. Seeds many.

umbellatus. 1. BUTOMUS.

Flowering Rush. Slow streams, &c. P. 6. Curtis.

Root tuberosus creeping - leaves angular, smooth flat above, scabrous
2 to 4 feet - flowers reddish, beautiful -

ALPHABETIC

ALPHABETIC

CLASS X.

TRICLYT

DECANDRIA.

MONOGYNIA.



1. Flowers many petalled, (petals) equal.

536. MONOTROPA. Cal. corol-like, gibbous at the base. Caps. 5-celled, many-seeded.

554. PYROLA. Anthers 2-horned upwards. Caps. 5-celled, many-seeded.

(XI. *Lythrum salicaria* XVI. *Geranium*.)

2. Flowers 1-petalled, (segments) equal.

549. ANDROMEDA. Cor. campanulate, round. Caps. 5-celled.

552. ARBUTUS. Cor. ovate, transparent at the base. Berry 5-celled.

(VIII. *Vaccinium Myrtillus* & *Oxycoccus*. *Chlora perfoliata*.)

3. Flowers incomplete.

(XXII. *Mercurialis*.)

DIGYNIA.

562. SCLERANTHUS. Cor. o. Cal. 5-cleft, superior. Seeds 2.

553. CHRYSOSPLENIUM. Cal. o. Cor. superior. Caps. 2-celled, 2-beaked.

559. SAXIFRAGA. Cor. 5-petalled. Cal. 5-parted. Caps. 1-celled, 2-beaked.

564. SAPONARIA. Cor. 5-petalled. Cal. tubular, naked at the base. Caps. 1-celled, oblong.

565. DIANTHUS. Cor. 5-petalled. Cal. tubular, scaly at the base. Caps. 1-celled, oblong.

DECANDRIA.

(V. *Herniaria*. XI. *Agrimonia* *Eupatoria*. XXI.
Quercus. *Carpinus*.)

TRIGYNIA.

569. ARENA'RIA. Caps. 1-celled. Petals entire, spreading.
 568. STELLA'RIA. Caps. 1-celled. Petals 2-parted, spreading.
 566. CUCU'BALUS. Caps. 3-celled. Petals bifid, throat naked.
 367. SILE'NE. Caps. 3-celled. Petals bifid, throat crowned.
 570. CHERLE'RIA. Caps. 3-celled. Nectaries petal-like, smaller than the calyx.
 (V. *Sambucus* *Ebulus*. Alsine. VIII. *Polygonum* *Bistorta*.)

PENTAGYNIA.

578. COTYLE'DON. Caps. 5, annexed to the nectaries. Cor. 1-petalled.
 579. SE'DUM. Caps. 5, annexed to the nectaries. Cor. 5-petalled.
 582. OX'ALIS. Caps. 5-celled, angular. Cor. petals somewhat cohering at the base.
 584. LYNCH'NIS. Caps. 3-celled, oblong. Cal. tubular, membranous.
 583. AGROSTEM'MA. Caps. 1-celled, oblong. Cal. tubular, coriaceous.
 585. CERAS'TIUM. Caps. 1-celled. Pet. bifid. Cal. 5-leaved.
 586. SPER'GULA. Caps. 1-celled. Petals entire. Cal. 5-leaved.

(VIII. *Adoxa* *Moschatellina*. X. *Cucubalus* *Behen*.
Arenaria *media*. XVI. *Geranium*. XXI.
Quercus.)

MONOGYNIA.

536. MONOT'ROPA. Cal. 0. Pet. 10, 5 outer ones hollowed at the base, melliferous. Caps. 5-valved. (A fifth part of the number is wanting in some of the flowers.)

DECANDRIA: MONOGYNIA. Monotropa.

91

Plant. *laevigata* the delicate of verdure *stem*, enlarged at base on fleshy scales. *Flowers* yellow on *young* become black & *thys.* *cut* terminal

1. M. Lateral flowers with 8 stam., the terminat- ing with 10. *Bird's Nest.* Woods. P. 7. E. Bot. 69. *Flower* 5. *cut*

554. PY'ROLA. Cal. 5-parted. Pet. 5. Caps.

5-celled, opening at the angles. *Corolla* 5-parted

1. P. Stamens ascending, pistil declining (depressed) so-incurved, obliquely truncated. PERS.) *rotundifolia*. *Racemes* many *lia.* *Flowers*, white
2. P. Flow. racemous, scattered, stam. and pist. straight. (Stam. spreading every way. E. *Less Wintergreen.* Woods. P. 6. 7. E. Bot. 213. *Stem* creeping, *scaly* *herb* *upright*
3. P. Raceme unilateral. (Cor. generally closed, secund.) *Stamens* & *pistil* projecting, filam. geniculate. PERS.) *Less Wintergreen.* Woods. P. 6. 7. E. Bot. 158. *Stamens* *concolorish*, *Stamens* *regularly bent* - *Style* straight - *half as long* the *Stamens*
4. P. Scape 1-flowered. *Single fl.* *Winterg.* Moray, Scoll. P. 7. E. Bot. 146. *uniflora.*

549. ANDROM'EDA. Cal. 5-parted. Cor. ovate, mouth 5-cleft. Caps. 5-celled.

1. A. Peduncles aggregate, corols ovate, leaves alternate, lanceolate, revolute. (Anthers awn-ternate, lanceolate, revolute. (Anthers awn-*Polifolia.* *anthers* two-*horned* above *opening* ed.) *Stem* *creeping* *Flowers* *flesh* *color*
2. A. Racemes 1-rowed, flowers 4-cleft, ovate, leaves alternate, lanceolate, revolute. Erica *Daboecia.* *Daboecii* Sp. Pl. See Erica *Daboecii.* Page 84.

Obs. The essence of the genus *Andromeda* consists in the capsule being superior; the dissepiments being formed from the middle of the valves, and not from their inflected margins. Hence A. *Daboecia*, &c. ought to be removed to Erica. SMITH Pl. icon. p. 48.

552. ARBU'TUS. Cal. 5-parted. Cor. ovate, mouth 5-cleft, base pellucid. Berry 5-celled. *Anthers* *awned* *opening* at the tip with two *processes*

1. A. Stem arboreous, leaves smooth, obtusely serrated, panicle terminating, berries many-seeded. *Unc'do.* *Berry* *tubercular* *Flowers* *reddish* *white*
2. A. Stems procumbent, leaves wrinkled, serrated (ciliate). *Dark* *facing* *off*, *berry* *black*. - *Corolla* *white*
3. A. Stems procumbent, leaves very entire (smooth, veined like net-work underneath). *U'va* *ur'si.* *Berry* *five* *celled* *20* *stem* *under* *sh. white* *column*

Scleranthus scernis - the polish cochineal insect, is found in summer on its roots -
Scleranthus annuus - Steam of the decoction used to cure tooth-ach

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DECANDRIA. DIGYNIA. Scleranthus.

DIGYNIA.

562. SCLERANTHUS. Cal. 1-leaved. Cor. o.
 Seeds 2, inclosed in the calyx. (Cal. inferior. Seed 1. EHRHART.)

Root filious annuus.
 Calyx 10. winter lobes
 acute very spreading

1. S. Calyxes of the fruit patulous (segments acuminate, thornless; stems spreading; stigmas capitate, yellow).

Herb glauc. perennis.
 rather shining after rain?
 reddish - leaves often downy
 polycar-
 pos?

German Knotgrass. Sandy gr. A. 7. 8. E. Bot. 351.
 2. S. Cal. of the fruit closed (segm. obtuse; stems procumbent, stigmas simple, white).

Perennial Knotgrass. Sandy cornfi. P. 7. 8. E. B. 352.

3. S. Calyxes of the fruit widely spreading, thorny, stem rather villous;

— Broomholm, near Langholm, Eskdale. LIGHTF.

558. CHRYSOSPLENIUM. Cal. 4, or 5-cleft, coloured. Cor. o. Caps. 2-beaked, 1-celled, many-seeded.

Herb succulent, brittle.
 Flours gold alter'nifo-
 yellow, mostly lum.

1. C. Leaves alternate. (Ripe capsules distant from each other.)

4-lobed can. half 5-lobed
 oppositi-
 fo'lium,

Alternat-leaved Saxgreen. Woods. P. 3. 4. E. B. 54.

2. C. Leaves opposite. (Beaks of the caps. remaining approximate; flow. sometimes octandrous.)

leaves opposite
 slenderer than
 former

Golden Saxifrage. Shady pl. P. 3—5. Curt. 138.

559. SAXIFRAGA. Cal. 5-parted (5-cleft). Cor. 5-petalled. Caps. 2-beaked, 1-celled, many-seeded.

1. Leaves undivided; stem almost naked.

Leaves rather stella'ris.
 fleshy; Petals equal oblong
 2 yellow dots on each
 thick tufted - stem rooting

1. S. Leaves serrated (oblongo-obovate), stem naked, branched; petals acuminate, (2 dots upon each; calyx reflected.)

leaves radical, broad
 scape veined hairy

3. S. Leaves ovate, crenate, almost sessile, stem naked, flowers heaped together. (Leaves never sessile, but attenuated into a flat petiole. VAHL.)

Petals spotted with green
 coats tufted

2. S. Leaves ovate, somewhat retuse, margin cartilagineo-crenate, stem naked, panicled. (Leaves somewhat cordate, stem hirsute, reddish, pet. of a dilute red, spotted, larger spots yellow, smaller red. SCHUKER.)

Mount. Saxifrage. High mount. P. 4—10. E. B. 440.

3. S. Leaves ovate, somewhat retuse, margin cartilagineo-crenate, stem naked, panicled. (Leaves somewhat cordate, stem hirsute, reddish, pet. of a dilute red, spotted, larger spots yellow, smaller red. SCHUKER.)

London Pride, Mount. in Irel, P. 6. Park. 738. 2.

2. Leaves undivided, stem leafy.

2. Leaves undivided, stem leafy.
Stem hirsute, erect, rooty, bulbous, flowers hairy, root upright
4. S. Stem-leaves opposite, imbricated, the highest oppositi-
 ciliate. (Flow. solitary, terminating. E. Bot.) *fo'lia. three, lower as*
Heath-like Saxifrage. Rocks. P. 4. F. Dan. 34. long as stems
5. S. Stem-leaves (lineari-) lanceolate, alternate, *Hirculus. Root fibrous*
 naked, unarmed, stem (nearly) erect. (Pet- *stem and leaves, at*
 als with 2 pointed projections, towards the *bottom branched, twigs*
 base. CURT.) *situated on 2 small ones* *lying down Petioles*
3 or 4 flowered - Petal.
 Marsh Saxifrage. Knutsford Moor. P. 7. 8. Curt. *spotted as far as the middle w. yellow*
6. S. Stem-leaves lineari-subulate, scattered, nak- *aizoides.*
 ed, unarmed, stems decumbent, (Stem-leaves *leaves alternate, leathery*
 linear, scattered, generally dentato-ciliate; *flowers panicled,*
 root-leaves aggregate, stem decumbent. E. *yellow, dotted w. red*
 Bot.) S. *autumnalis*. Huds. Lightf.
 Yellow Mount. S. Bogs on m. P. 7. 8. E. Bot., 39.
- Obs. S. *autumnalis*. Lin., to which he has given this charac-
 ter, "Stem-leaves linear, alternate, ciliate; root-leaves
 aggregate," is a var. of S. *aizoides*, according to Haller
 and Jacquin; but Dr. Smith favours the opinion of
 Stokes, who makes it a ciliate var. of S. *Hirculus*.
3. Leaves lobed; stems erect. (hypnoides.)
7. S. Stem-leaves reniform, lobed, stem branched, granula'ta. *fl. panicled*
 root granulated. (Germen inferior.) *pure white on root granulated*
 White Saxifrage. Dry pastures. P. 4. 5. Curtis. *stem upright; viscid*
8. S. Stem-leaves palmate, petioled, stem very cer'nea. *leaves fleshy*
 simple, 1-flowered, bulbiferous. (Germ. su- *kidney-shaped flowers*
 perior—Var. with a branched stem.) *white, solitary petals a little richer*
 — On Ben Lawers, Scotl. P. — F. Dan., 22. *Root scaly*
9. S. Stem-leaves palmate, highest floral leaf rivula'ris. *Root fibrous*
 ovate, stem simple, mostly 2-flowered, *flowers upright white*
 — Ben Nevis. — F. Dan. 118. *Petals pointed, small*
10. S. Stem-leaves cuneiform, 3-cleft, alternate, tridactyl- *Stem upright*
 stem erect, branched. *Root fibrous, leaves dry, bitter. fl. panicled, white*
 Var. 2. Stem branched, upper leaves opposite,
 lanceolate.
 — 3. Stem unbranched, all the leaves entire.
 Rue-leaved Sax. Walls, &c. A. 4. 5. Curt., 129.
11. S. Root-leaves aggregate, linear, entire, and 3- *moscha'ta. And leaves*
 cleft, hirsute, glutinous as well as the stem, *linear not divided*
 flow. on long peduncles. S. *caespitosa*. Huds. *fringed - stem bread-shaped*
 Matted Saxif. Mount. P. 7. 8. Jacq. Mis. ii. 21. *in the stalk fl. yellow*
12. S. Stem-leaves linear, entire, or 3-cleft, stolons *hypnoides. And leaves*
 procumbent, stem erect, nearly naked. *linear, linear ciliate*
 Moss Saxifrage. Rocks. P. 5-7. E. Bot. 454. *erect 3 out-radical*

Saxifraga officinalis - Plant like *Saxifraga*, but with
 water and dissolving glass; description used in *Journal*; and
 the *Journal* of *Saxifraga* also externally in *Fl.*
Flowers 5 or 7. *palma'ta*. 13. S. Leaves hairy, palmate, lower ones 5-parted,
 Petals yellow-white, perianth upper 3-parted; shoots ascending, stem erect,
 leafy, panicle dense, few-flowered, petals round-
 iced. E. Bot. S. *petraea* With. S. *caespitosa*
 Root-leaves 5 or 7 cut-
 very hairy - F. Dan. 71.

Palmate Saxif. Cwm Idwell. P. 4-6, E. Bot. 455.

Obs. S. *petraea*, to which this plant is referred by Withering, is thus described by Lin. "Stem-leaves palmate-3-parted, segments mostly 3-cleft, stem very much branched, limber;" and the following description is added by Persoon, from Vahl, "Leaves cuneiform, root-leaves entire, and 3-toothed; stem-leaves 5-toothed, upper ones 3-cleft, peduncles mostly 3-flowered." See Sys. Veg. ed. 15.—Dr. Smith informs us that the true S. *petraea* figured by Pona, and sent by Seguier to Lin., is widely different from the plant in question, and from var. β . of S. *tridactylites* in Fl. Suec. He cannot refer S. *palmata* to any species described in Haller, &c., but quotes the figure of Fl. *Danica* referred to above, and assures us that it has no resemblance to S. *caespitosa* Lin. See E. Bot. p. 455.

564. SAPONA'RIA. Cal. 1-leaved, naked. Pet. 5; with claws. Caps. oblong, 1-celled.

Root very long officinalis. 1. S. Calyx cylindrical, leaves ovato-lanceolate.
Stems creeping, leaves Common Soapwort. Meadows, &c. P. 7. 8. Curtis.
ribbed. panicle many

Obs. It is frequently found in a wild state with the petals much multiplied.

Var. 2. Hollow-leaved. *Gentiana concava* Ger. Leaf convolute. Ray syn. 339. 7. Ger. 435. Park. 641. It is no longer to be found, according to Morton, in the place pointed out by Gerard. See Dill. in Ray syn. 339.

565. DIAN'THUS. Cal. cylindrical, 1-leaved, with 4 (2-8) scales at the base. Pet. 5, with claws. Caps. cylindrical, 1-celled.

1. Flowers aggregate.

barbatus? 1. D. Fl. fascicled, calyx-scales ovato-subulate, as long as the tube, leaves lanceolate.

Sweet William. Wall King's Weston. P. 6. Ger. 598. 4.

not perianth *Arme'ria*. 2. D. Fl. fascicled, calyx-scales lanceolate, villous, (nearly) equal in length to the tube.

Deptford Pink. Gravelly mead. A. 7. E. Bot. 317.

stem arising - petals serrated *pro'lifer*. 3. D. Fl. capitate, calyx-scales ovate, obtuse, awnless, longer than the tube.

red, rarely white *Proliferous Pink*. Sandy mead. A. 7. F. Dan. 221.

2. Fl. solitary, stem many-flowered.

DECANDRIA. DIGYNIA. *Dianthus*.

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4. D. Calyx-scales somewhat ovate, very short, corols crenate (beardless). *Carnation*. Old walls. P. 6. 7. *E. Bot.* 214. *deltoidea*. *Flowers in long phyllus. Flower red or pink red. 2 lines of flowers, cordate*
5. D. Calyx-scales (mostly) 2, lanceolate, cor. crenate. (Leaves rather obtuse and pubescent. *SMITH*. in *Lin. Tr.* ii.—Pet. toothed, red, with a concentric line at the base, and white hair-bearing spots. *PERS.*) *deltoidea*. *Flowers in tufts - flower red, flesh red, smooth with a purple ring at the base*
6. D. Flowers mostly solitary, calyx-scales lanceolate, four together, short, corols crenate. (Limbus white, not flesh-col., with a transverse purple line at the base. The 2 lower scales more remote from the calyx. *ROTH*. See *Pers.* p. 447.) *The crimson mountain pink might be found*
King's Park, Ed. P. 6. 7. Dil. Elth. 298. 384. *in plenty on Cheddar cliff, or rocky hills of Mendips - somewhat*
Obs. This is made a var. only of *D. deltoidea* by *Smith* and *Withering*. *glaucus. mountain Pink stem branches 6 or 7 high*
7. D. Stems mostly 1-flowered, calyx-scales roundish, short; petals crenate, bearded, leaves rough at the margin. *E. Bot.* WITH. *D. virginicus* β. *Lin.* *D. glaucus* *Huds.* *ca'sius. Root woody Petals with purple line at the margin*
Mountain Pink. Cheddar Rocks. P. 7. E. Bot. 62.

3. Stem 1-flowered, herbaceous.

TRIGYNIA.

569. ARENARIA. Cal. 5-leaved, spreading. Pet. 5; entire. Caps. 1-celled, many-seeded.

1. A. Leaves ovate, acute, fleshy. (Glands on the peplodes. *Root creeping very long - stem prostrate*
receptacle.) *Flowers small*
Sea Sandwort. Sea shore. P. 6. 7. E. Bot. 189.
2. A. Leaves ovate, acute, petioles (3)-nerved. *triner'via. Stem slender branched - peduncles purple*
Plantain-leaved Sandwort. Hedges. A. 5. 7. Curt.
3. A. Leaves somewhat ovate, acute, sessile, corols shorter than the calyx. *Flowers white small*
Thyme-leaved Sandw. Walls. A. 5—7. Curt. 268. *serpyll'ia. Leaves of the stem folia. Leaves stiff, forked*
4. A. (Very smooth) Leaves semi-cylindrical, acuminate, opposite, as long as (or longer than) the internodes of the stem; stipules membranous, acute, stem prostrate, caps. longer than (twice as long as) the calyx. WITH. *A. rubra* β. *marina. Lin.* See *Pers.* P. 454. *mar'ina. Stem prostrate leaves fleshy, unarised. Flowers large, pale flesh red or purple - succulent*
Sea coast. P. 5—10. F. Dan. 740.

- Stem prostrate ru'bra.* 5. *A.* Leaves filiform, stipules membranous, sheathing. (Leaves fascicled, as long as, or shorter than the internodes of the stem, calyx hirsute. *Roth.* Cal. as long as the caps., leaves only half as long as the joints. *With.*)
Leaves linear, mucronate
panicle terminal downy
flowers bluish flesh col. Purple S. Sandy past. *A.* 6—8. *Pet.* 59. 8.
- me'dia?* 6. *A.* Leaves linear, fleshy, stipules membranous, stems (and leaves) pubescent. (Calyx covering half the caps. A doubtfull plant. *PERS.*) *A. ru-bra* β . *Huds.* *Spergula maritima*, &c. *DILL.* in *Ray* 351. 11?
 — Past. near the Sea. *A.* 6—9. *Eph.* v. s. 6. t. 4.
Obs. Some doubts still remain whether *A. media* Lin. be a distinct species; and it is not quite clear to *With.* whether the British plant be the real *media* of *Lit.* He thinks the former may be only a var. of *A. marina*; and gives the following char. of it, "Leaves linear-subulate, 6 in a verticill, stem erect, caps. twice the length of the calyx." See *With.* vol. 2. p. 422 & 3.
- ver'na.* 7. *A.* Leaves subulate, stems paniced, cal. acuminate, serrated. (Calyx-leaves lanceolate, shorter than the petals. *With.*)
Mountain Sandw. Mountains. *A.* 5—8. *Pet.* 59. 4.
- ten uifo'lia.* 8. *A.* Leaves subulate, stem paniced, caps. erect, petals (one half) shorter than the calyx, lanceolate. (Calyx-leaflets acuminate, or awned, marked underneath with 2 green lines.)
Fine-leaved Sandw. Sandy past. *A.* 6. 7. *E. B.* 219.
- ju'niperi'-na.* 9. *A.* Leaves subulate, thorny, stems erect, calyx striated, caps. oblong. (Calyx-leaves ovate, scarcely hirsute, nearly as long as the pet. *With.*)
 — Near *Llanberris*. *P.* — *Ger. fl. prov.* 15. 1.
- la'ricifo'-lia.* 10. *A.* Leaves setaceous, stem somewhat naked above, cal. rather hirsute. (Calyx-leaves linear-lanceolate, shorter than the pet. *With.*)
Larch-leaved Sandw. Mount. *P.* 7. 8. *Jaeg. Aus.* 3. 272.
568. *STELLA'RIA.* Cal. 5-leaved, spreading. *Pet.* 5, 2-parted. *Caps.* 1-celled, many-seeded.
- Stem rather hairy nem'orum.* 1. *S.* Leaves (lower) cordate, petioled (upper ovato-lanceolate, sessile); paniced with branched peduncles.
Stem hollow, weak
Root creeping leaves pale Broad-leaved *Stitchwort*. Woods. *P.* 5. 6. *E. B.* 92.
- Stem upright* *Holos'tea.* 2. *S.* Leaves lanceolate, finely serrated, pet. bifid.
sup. Petals 5-nerved as Greater *Stitchw.* Hedges. *P.* 4. 5. *Curt.*
long as the calyx - Panicle forked, leaf. Peduncles upright

Stellaria media - Chickweed. Young shoots boiled make an excellent spring herb - (Plant used as green for birds)

DECANDRIA. TRIGYNIA. *Stellaria*.

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3. *S. Pet.* deeply divided, leaves ovato-cordate, *me'dia*. Petals purplish stems with a hairy ridge on one side. WITH. *peduncles upright, solitary.*
Alsine media: Lin. See page 65. *Stem & one flowered, calyx hairy*
4. *S.* Leaves linear, very entire, flow. panicle. *graminea*. *Stem upright, erect*
Less Stitchw. Hedge banks. A. 5. Pet. 38. 3. *calyx leaves white, w. green ribs*
5. *S.* Leaves linear-lanceolate, very entire, glaucous, decussate; pet. half as large again as the calyx. *SIBTH.* in Flor. ox. where it is denominated *S. media*. *S. graminea* *B. Huds.* *glau'ca. Stem & one upright erect - peduncles upright, apic' and terminal.*
Glaucous-leav. St. Ditch-banks. P. 6. 7. Pet. 58. 2.
6. *S.* Leaves lanceolate, very entire, stems procumbent, panicles lateral. SCHREB. *S. graminea* *v. Lin. & Huds.* *uligino'sa.*
Bog Stitchwort. Ditches, &c. A. 6. Ger. 613. 8.
7. *S.* Leaves oblong, peduncles generally 2-flowered. (Stem diffuse, flower-bearing branches ascending, leaves sessile, smooth, flow. terminating 1-3, peduncles long, incrassated, 1-flowered. SMITH.) *Stem branched at bottom with a single line of hairs*
— On Ben Nevis, Scotl. Smith pl. ic. 15.

566. *CUCU'BALUS*. Cal. inflated. Pet. 5, with claws, throat not crowned. Caps. 3-celled.

1. *C.* Cal. campanulate, pet. distant, pericarps coloured, branches diverging. *bacciferus*. *Stem weak flowers solid, calyx bell shape downy - Capsule fleshy - Root creeping, petals slightly toothed at the throat.*
Obs. By the crown at the throat of the corol (which however is sometimes wanting) we might be led to refer this plant to *Silene*; but the fruit, which is a one-celled berry, excludes it both from *Cucubalus* and *Silene*. See With.

Berry-bear. Chickweed. Hedges. P. 6. 7. Ger. 614. 13.

2. *C.* Cal. nearly globular, smooth, with reticulated veins, caps. 3-celled, corols nearly naked. (Leaves ovato-lanceolate, glaucous, smooth. E. Bot.) *Be'hen. Root knotted. Flowers drooping, white*
3. *C.* Fl. dioicous (verticillate), pet. linear, undivided. *Oti'tes.*
Spatting Poppy. Cornfields. P. 6—8. E. Bot. 164.

Spanish Campion. Grav. past. P. 7. 8. E. Bot. 85.

567. *SILE'NE*. Cal. ventricose. Pet. 5, with claws, crowned at the throat, Caps. 3-celled.

1. Fl. solitary, lateral.

1. *S.* Hirsute, pet. emarginate, fl. erect, when in fruit reflected, peduncled, alternate. *leaves linear lanceolate flowers white.*

English Catchfly. Sandy cornfi. A. 6. 7. Curt. 266.

Herb hispid quin'que- 2. S. Pet. very entire, roundish, fruit solitary, erect,
petals white vulnera. alternate. *Stems fibrous - Ten much branched*
with a blood-red spot in the Variegated Catchf. Sandy cornfi. A. 6—8. E. Bot. 86.
center, leaves ellip. lanceolate

2. Fl. lateral, or terminating. WITH.

Herb downy nutans. 3. S. Pet. bifid, fl. lateral, 1-rowed, cernuous, pani-
flower facing one way hence cle nodding. (Calyx ribbed.)
Stems many simple, petals white Nottingham Catchfly. Walls. P. 6. 7. E. Bot. 465.

Flowers terminal maritima. 4. S. Stem procumbent, branches ascending, calyx
subtany, drooping, white - veined, smooth, pet. cloven, segments very entire.
WITH. C. Behen & Lin. S. amana.
Huds.

Sea Campion. Sea coast. P. 3—8. F. Dan. 857.

3. Flowers from the forks of the stem.

Petals notched Armeria. 5. S. Fl. fasciculate, fastigiate, higher leaves cor-
acutely crowned - stem veined date (or cordato-lanceolate), smooth, pet. entire.
beneath the joints Common Catchfly. Cornfields. A. 7. 8. F. Dan. 559.

leaves clasping flower - red conoidea. 6. S. Cal. of the fruit globular, acuminate, striated
with 30 scores, leaves smooth (veined), pet.
entire.

Corn Catchfly. Sandy cornfi. A. 6. 7. Ger. 470. 7.

Stems forked conica. 7. S. Cal. of the fruit conical, with 30 scores, leaves
leaves lanceolate soft, pet. cloven. (Leaves rather tomentous,
petals rose-red - capsule fleshy veinless. Pet. indistinctly emarginate, almost
entire. ROTH.)

— Sandy cornfields. A. 6. 7. Ger. 470. 6.

Stems forked noctiflora. 8. S. Cal. 10-angled, teeth as long as the tube, stem
leaves lanceolate - hairy dichotomous, pet. bifid. (Stem and cal. viscous,
petals notched, bluntly rounded hairy.)

pink-colored Night-flowering C. Cornfields. A. 7. E. Bot. 291.

4. Stemless.

Stems very herb acaulis. 1. S. Depressed, pet. emarginate (caps. globular).
notched - leaves linear Cucubalus acaulis. Huds.

unged at bottom Moss Catchfly. Highl. Mount. P. 5. 6. Lightf. 12.1.

Petals slightly notched around 570. CHERLERIA. Cal. 5-leaved. Nect. 5, bifid,
petaliform. Anth. alternate ones barren.
Caps. 1-celled, 3-valved, 3-seeded.

Petuncle high sedoides. 1. CHERIERIA. *Stems forked - leaves 3 sided 3rd*
brilliant one flowered - 2 back Moss-like Cyphel. Highl. M. P. 7. 8. Park. 737.11.
colored in the middle - Root woody - flowers yellowish-green

PENTAGYNIA.

578. COTYLE'DON. Cal. 5-cleft. Cor. 1-petall.
ed. Scales 5 nectariferous at the base of
the germ. Caps. 5.

1. C. Leaves peltate, crenate (the lowest some-umbilicus. Root tuberous
times reniform), stem mostly simple, flow. Flowers spiked yellowish
pendulous, bractes entire. Huds. C. umbi-
licus β . Lin. *green in the mouth*
Stems very short

Com. Navel-wort. Old walls. P. 6—8. E. Bot. 325.

2. C. Leaves peltate, crenate, stem nearly simple, *but: Root creeping*
flow. erect, bractes toothed. Huds. C. um-
bilicus α . Lin. *Stems 15 inches flowers*
yellow

Yellow Navel-wort. Walls, &c. P. 6. Dodart, 73.

Obs. The above two species are considered as var. only by
Linn. who gives the annexed char. of C. umbilicus,
"Leaves cucullato-peltate, serrato-dentate, alternate,
stem branched, flowers erect."

579. SE'DUM. Cal. 5-cleft. Cor. 5-petalled.
Scales 5 nectariferous at the base of the
germ. Caps. 5.

1. Leaves flat.

1. S. Leaves flattish, serrated, corymb leafy, stem Teld'phium. leaves altie-
erect. *Flowers whitish*
Orpine Stonecrop. Hedges. P. 8. Curt. 210. *July 30 rate, lanceolate, flowers*
white.

2. Leaves cylindrical. *leaves boiled in milk, drink it*

2. S. Stem erect, leaves flattish, leaves and pedun- villos'um. Root fibrous
cles somewhat hairy. *Petals erect white with a purple red*
Marsh Stonecr. Moist rocks. A. 6. 7. E. Bot. 394.

3. S. Leaves oblong, obtuse, nearly cylindrical, al'bum.
sessile, spreading, cyme branched.

White-flowered Stonec. Walls, &c. P. 6. 7. Curt.

4. S. Leaves nearly ovate, adnato-sessile, gibbous, a'cre. leaves wedge shaped
somewhat erect, alternate, cyme 3-cleft. *branched out at bottom*

Pepper Stonecrop. Walls, &c. P. 6. 7. Curtis. *It. white in flower*

5. S. Leaves somewhat ovate, adnato-sessile, gib- sexan'gu-
bous, rather erect, imbricated in 6 rows. la're.

Inspid Stonec. Walls, &c. P. 6. Curt. 225.

6. S. Leaves somewhat ovate, adnato-sessile, gib- an'glicum.

bous, alternate, cyme branched, bifid. Huds. *Stem ascending*

English Stonec. Rocks, &c. P. 5—8. E. Bot. 171.

7. S. Leaves opposite, ovate, obtuse, fleshy, stem dasyphyll. *Stem decum.*
weak, flow. scattered. *glutinous* *lum. creeping*

Round-leaved St. Walls, &c. P. 6. 7. Curt. 147. *leaves imbricate*
calyx hairy? *reddish flower*
in blue

Locales acetosa - Juice contains much oxalat of Potash, which renders it gratefully acid, and may be separated by crystallization; leaves in infusion cooling & make an agreeable whey.

100

DECANDRIA. PENTAGYNIA. *Sedum*.

Plant biting, used in salad

leaves small, reflex um. 8. *S.* Leaves subulate, scattered, loose at the base, the lower ones recurved. *crowded - stem branched* Yellow Stonecrop. Walls, &c. P. 7. F. Dan. 113.

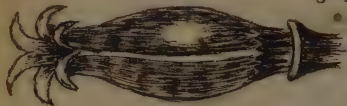
at bottom secondary on foot *rupes'tre.* 9. *S.* Leaves subulate, 5-rowed, crowded, loose at the base, flowers cymous. Pet. sometimes 6, or 7. *leaves as long as the calyx* Rock Stonec. St. Vincent's rocks. P. 7. E. Bot. 170.

containing & eaten with lettuce 582. *OX'ALIS.* Cal. 5-leaved. Pet. connected by the claws. Caps. 5-cornered, opening at the angles.

Root toothed *Acetosella.* 1. *O.* Scapes 1-flowered, leaves ternate, leaflets obcordate, hairy. Wood Sorrel. Woods, &c. P. 4. 5. Curt. 111.

leaves so stem - Petals *cornicula'.* 2. *O.* Stem decumbent, herbaceous, peduncles umbelliferous. *Heart-shaped leaves* Yellow-flow. Wood S. Near Exet. P. 5-10. F. D. 873.

ternate reverse heart shape *Leaves* 584. *LYCH'NIS.* Cal. 1-leaved, oblong, smooth. Pet. 5, with claws, limbus (laminæ) mostly bifid. Caps. (1-3, or) 5-celled. *The capsule of a Lychnis opening by teeth at upper part -*



Herb biennial *dioica.* 1. *L.* Capsules 1-celled, roundish, (teeth recurved; flow. red, inodorous, open all the day.) *SIBTH.* *L. dioica* α. Huds. With. *Stem branched weak flower-red* Red-flow. Champion. Hedges. P. 5-9. Curtis.

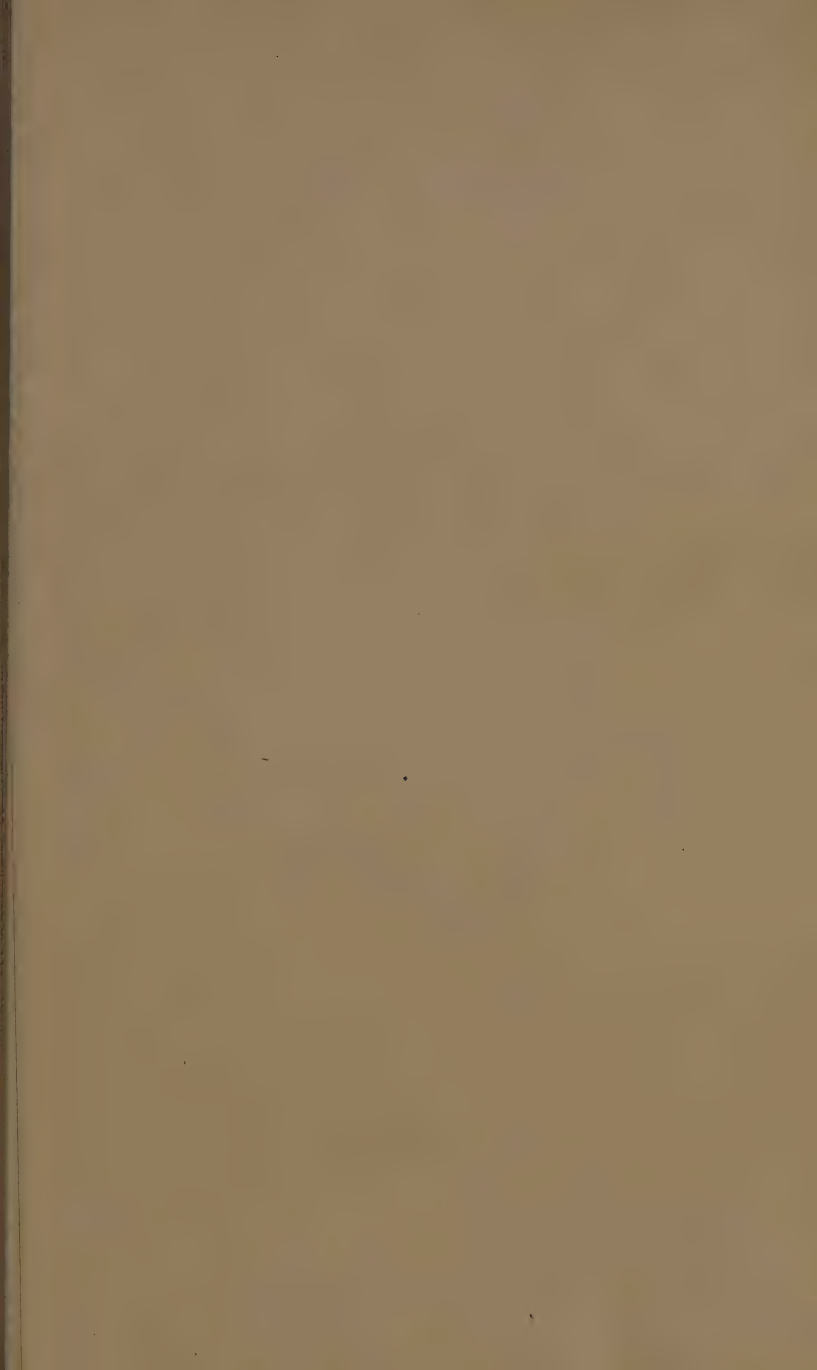
Calyx both sides 10 ribbed *vespertina.* 2. *L.* Capsules 1-celled, conical (teeth straight; flow. white, odorous, opening towards evening). *SIBTH.* *L. dioica* β. Huds. With. *Stem knotted, upright* White-fl. Champion. Hedges. P. 6-8. F. Dan. 792.

Petals reverse heart shape *Obs.* These two species are included under *L. dioica* by Lin., with this char. "Flow. dioicous." *enlarged - Root perisperm* *Obs. 2.* Hudson observes that *L. dioica* sometimes bears hermaph. flow., and that the petals are then flesh-coloured.



Calyx of the males elliptical 2. Flow. hermaphrodite. *lobes shaped 10 ribbed not* *Stem angular* *Flos-cu'cu.* 2. *L.* Petals (3, or) 4-cleft, fruit roundish. (Caps. 1-celled, 5-toothed. *EHRRH.*)

veined - Of the females ovate *leaves lanceol.* *Petals blood rose-red* Meadow Pinks. Moist Meadows. P. 6. Curtis. *Stem jointed* *Viscaria.* 3. *L.* Petals nearly entire. - *Roots tufted* *viscous - leaves linear lanceol.* Viscous Catchfly. Mount. past. P. 5. 6. F. Dan. 1032.

keel and bald - Calyx hairy 583. *AGROSTEM'MA.* Cal. 1-leaved, coriaceous. Pet. 5, with claws. Limbus obtuse, undivided. Caps. 1-celled.



Cerastium

bracts arranged round a central column thus  on longish hemicylindrical imbrigo of the following shape, which would like a sausage  but it does not appear to point to the hilum but to originate from it

Lychnis dioica - A number of small filaments are seen round the base of the capsule, apparently abortive stamens the ovules are very numerous around 5 central placentas of following shape

The following figure is a section of capsule the oval figures being placentae -




3




No 1 Ripe capsule with the cen




trifid pentagonal placenta umbilical cord and seeds - 2 section of 20 shows

the seeds arranged in double rows on each of the five placentae - 3 kidney shaped seed

Nellor Hollost - May 20 Pollen has a hexagonal outline and covered with small luminous spots openings - at one part of the surface it is one with a pentagonal figure thus  ovules arranged in six rows one on each side three per central placenta (Fig 151, Page 151) seeds

Ovules numerous -

May 20 Only 3 or 4 perfect seeds are found at the bottom of each capsule covered with tubercles 

Artemisia tridentata - The seeds are arranged around
May 10th a branching placenta as in *Cerastium*
 seeds are very numerous the seeds are
of this shape  and covered with small glandular
bodies of considerable length in comparison to the size
of the seed of this shape  fixed by a narrow neck to the
seed and these small bodies are also covered
with smaller tubercles -

1. A. Hirsute, calyx as long as (longer than) the Githa'go. *Stem branched*
corol, petals entire, naked. *Leaves upright, pressed to the*

Corn Cockle. Cornfields. A. 6. 7. Curt. 209. *Stem leaves lin. lanceolate*

585. CERASTIUM. Cal. 5-leaved. Pet. bifid. *How? leaves? purple*
Caps. 1-celled, opening at the point.

1. Capsules oblong.

1. C. Erect, villous, viscous. *leaves lance-oblong viscidum. Petals the same*
Clammy Mouse-ear. Pastures. A. 4—10. Curtis. *length as calyx*
2. C. Leaves ovate, pet. equal to the calyx, stems *vulga'tum. Stem hairy*
diffuse. *Flowers in umbels - peduncles very short - light green*
Narrow-leav. Mouse-ear. Past. P. 5—8. Curt. 130.
3. C. Leaves ovato-lanceolate (elliptical); stem *alpi'num.*
divided; caps. oblong (curved; panicle fork-
ed, few-flowered, furnished with bractes. E.
Bot.).

Alpine Mouse-ear. Mount. P. 6—8. E. Bot. 472.

4. C. Leaves ovate, somewhat tomentous, branches *latifo'bium. Stem bifid*
1-flowered, caps. globular. (Leaves oblongo-
ovate, obtuse, hairy, branches annual, flaccid, *long - peduncles, stem?*
1 or 2-flowered, caps. oval below, cylindrical, *simple, downy nearly as*
and slightly bent upwards, 10-cleft. JACQ.) *long as the stem*
Broad leav. Rough Chickw. Clogwyn y Gainedd. *Petals half as long again*
P. 6. 8. E. Bot. 473. *as the calyx*

Obs. This species is placed in the next division by Lin.

5. C. Leaves lineari-lanceolate, obtuse, smooth *arven'se. Stems in tufts*
(ciliate at the base); corols larger than the *Petals twice as long as*
calyx. *Panicle forked, few flowered - calyx white*
Corn Mouse-ear. Cornfields. P. 5—9. E. Bot. 93.

6. C. Fl. pentandrous (stam. sometimes 10, 5 in- *semi-de- Petals notched*
ner ones barren, appearing later, pet. emargin- *can'drum. shorter than calyx*
ate). *Stem tufted hairy, viscid above - leaves upright, waxy*
Least Mouse-ear. Walls, &c. A. 4. 5. Curt. 122. *Stems conglomerated*

7. C. Fl. pentandrous, pet. cloven ($\frac{1}{3}$ of their *pu'milum. Stems in tufts*
length), as long as the calyx, caps. twice as *leaves viscid at top*
long. WITH. *Stems conglomerated. Petals as long as calyx. Leaves*
— On dry banks, near Croydon. A. 2. 3. Curt. *none conspicuous. Stems in tufts*

8. C. Stem diffuse, dichotomous, flow. mostly tetran'- *Stems hairy*
trandrous (sometimes pentandrous), caps. *drum, as at or viscid*
scarcely longer than the calyx. CURT. Sagi- *leaves elliptical*
na cerastoides. E. Bot. 166. Lin. Tr. ii. 343. *Peduncles 3 times as long*
With. See S. cerastoides. Page 38. *as calyx. Petals shorter than*
Mouse-ear Chickw. Inch Keith. 5. 6. Curtis. *calyx*

Obs. Mr. Curtis found about $\frac{1}{4}$ of the flowers with 5 sta-
mens; and, from the form and structure of the pericarp
(a part, which forms the striking char. of a Cerastium),

Sparganium angustifolium - Herb rich in oil to cattle and causes them to give much milk; seeds used to feed poultry and to make bread

102 .DECANDRIA. PENTAGYNIA. *Cerastium*.

and the form of the seeds, as well as the general habit of the plant, has been induced to place it in this genus. Fl. Lond. V. II.

2. *Capsules roundish (latifolium)*.

umbella'- 9. C. Leaves ovate, flowers umbellate, petals nearly
tum. entire, fruit pendulous. Huds. See *Holosteum umbellatum*. Page 30.

tomento'- 10. C. Leaves oblong, tomentous (white), peduncles
sum. branched, caps. globular.

Woolly Mouse-ear. Ripton Wood, Huntingdonsh.

Peduncles aquatilis 11. C. Leaves cordate, sessile, flow. solitary, fruit
lateral, solit. cum. pendulous. (Resembling *Stellaria nemorum*.
Stem prostrate, very turned back
Root creeping. back
Petals white - deeply 2-parted

Marsh Mouse-ear. Watery places. P. 7. Curtis.

586. SPERGULA. Cal. 5-leaved. Pet. 5, entire.
Caps. ovate, 1-celled, 5-valved.

Fruct-bearing arven'sis 1. S. Leaves verticillate, flow. decandrous (with more
peduncles bent back - than 5 stam., stems thick at the joints, fruit pen-
Stem upright branched at dulous).
top - peduncles downy
one flowered

Corn Spurry. Cornfields, &c. A. 7—9. Curt.

Var. 2. β . Huds. S. pentandra. Lin. Leaves ver-
ticillate, flow. pentandrous.

subulata. 2. S. Leaves verticillate, hairy at the margin, rather
Herb rather hairy hairs 1-rowed, stems filiform, fl. solitary, stam. 5—10.

Glandular - leaves hairy WITH. S. laricina. Huds. Lightf. S. saginoides. Curt.

— Dry grav. past. P. 6—8. Curt. 139.

Fruct one-way, linear
not hairy - peduncles
very long solitary - Petals
the length of the calyx
Stem hairy at bottom
Flowers white, drooping -
leaves oval shape
lower ones widely sheathing
upper ones bundled, axillary - Stem few flowered 9 inches high

Obs. With. informs us, on the authority of Afzelius, that this is a kind of intermediate plant between S. laricina and saginoides Lin. Swartz gives the following description of S. subulata, "Leaves opposite, rather pointing one way, linear-subulate, keeled, ciliate, flow. decandrous." Act. Holm. 1789.

3. S. Leaves opposite, subulate, smooth, stems simple.
Knotted Spurry. Marshy places. P. 7—9. Curt. 261.

CLASS XI.

DODECANDRIA.

MONOGYNIA.

589. AS'ARUM. Cor. o. Cal. 3-cleft, superior.
Caps. 6-celled.

604. LYTH'RUM. Cor. 6-petalled. Cal. 12-cleft,
inferior. Caps. (1, or) 2-celled.

(XXI. *Ceratophyllum*.)

DIGYNIA.

607. AGRIMO'NIA. Cor. 5-petalled. Cal. 5-cleft.
Seeds 1, or 2. *often more than 20 stamens*

(XII. *Cratægus*. XXI. *Carpinus*. XXII.
Mercurialis.)

TRIGYNIA.

608. RESE'DA. Cor. petals many-cleft. Cal. part-
ed. Caps. 1-celled, (always) gaping.

609. EUPHOR'BIA. Cor. petals peltate. Cal.
ventricose. Caps. 3-grained (3-lobed.
E. Bot.)

(XXI. *Fagus*.)

TETRAGYNIA.

(XII. *Tormentilla erecta*.)

HEXAGYNIA.

(X. *Sedum Dasyphyllum*.)

DODECAGYNIA.

612. SEMPERVIVUM. Cor. 12-petalled. Cal. 12-parted. Caps. 12.

(XIII. *Thalictrum Alpinum*.)

Asarum Europ. - Stem round pubescent - flowers blackish purple
villous drooping - Root coarsely powdered, fibrous, freely
powdered inside; leaves in pairs -

MONOGYNIA.

led in dose of a dram or two
in emetic in powder 589. ASARUM. Cal. 3, or 4-cleft, sitting on the
germ. Cor. o. Caps. coriaceous, crowned.
Stimulatory, the basis of
europeum. A. Leaves reniform, obtuse, in pairs.
Asarabacca. Woods, &c. P. 5. F. Dan. 633.
Rare, but found in Derbyshire & Cheshire
604. LYTHURUM. Cal. (6) 12 (or 16) -cleft. Pet.
6, inserted in the calyx. Caps. 2-celled,
many-seeded.

Stem 2 feet, stiff Salicaria. 1. L. Leaves opposite (or alternate), cordato-lanceo-
late, flow. spiked, dodecandrous. *Cr. purple*
angular - leaves downy
Pulmon. Used in dysentery
and obstinate diarrhoea
Hyssopifolia. 2. L. Leaves alternate, linear, flow. hexandrous.
(Stam. 2, 4, 5 sometimes; calyx-teeth 12, 6
larger; 6 minute, sometimes wanting. SCHKUH.R.)
Roots visible stem has chy
at bottom - leaves bald Hyssop-leav. Willow-h. Watery pl. A. 7. 8. E. B. 292.

DIGYNIA.

607. AGRIMONIA. Cal. 5-toothed, fenced with
another. Pet. 5. Seeds 2, in the bottom of
the calyx.

Stem 2 feet, angular hairy
leaflets white Eupatoria. 1. A. Stem-leaves pinnate, the odd leaflet petioled,
oblong, deeply serrated
Root creeping
fruit hispid.
Stems many flowered, flowers yellow
Com. Agrimony. Cornfields, &c. P. 6. 7. Curt. 317.

TRIGYNIA.

608. RESEDA. Cal. 1-leaved, parted. Pet. laci-
niated. Caps. opening at the mouth, 1-
celled. *oblong triangular wrinkled*

Obs. (The character of this genus is very difficult to be deter-
mined, as it varies both in figure, and number in the differ-
ent species.)

Leaves bald Luteola. 1. R. Leaves lanceolate, entire, 1-toothed on each
side of the base; calyx 4-cleft.
Spike many flowered
Stem stiff - Root perennating
Wild Wood. Pastures. A. 6. 7. Mart. 40. E. Bot. 320.
Middle petal 4 cleft side petals entire - 3-lobed - receding erect
The plant affords a yellow dye, much used; also used to make
the yellow paint called Dutch pink - On which see the
stem becoming hollow and contains deep colouring matter

Lithium Salicaria - Same as the other with green
leaves 2 and 6. Same with yellow and green
the lower part of the stem is green
and yellowish green. The leaves are
thinner than that of the other of the same type.
The lower part of the stem is green and
the upper part is yellowish green. The leaves are
with a yellowish green. The lower part of
the stem is green and the upper part is
yellowish green. The leaves are
with a nipple at each angle
of the stem.

2. R. All the leaves 3-cleft, the inferior pinnate. *W'tea. Calyx six parted.*
Base Rocket. Cornfields. A. 6—8. E. Bot. 321. *Stem upright, 12 petals.*
609. EUPHORB'IA. Cor. 4, or 5-petalled, sitting *variously lobed.*
on the calyx. Cal. 1-leaved, ventricose.
Caps. 3-grained (pedicelled, elastic.
GAERTN.).
1. Dichotomous.
1. E. Dichotomous, leaves very entire, semi-cor-Pep'lis.
date, flow. solitary, axillary, stems procum-
bent. *4 irregular red disk - leaves petioled, rather fleshy and*
Purple Spurge. Sea shore. A. 7. 8. Ger. 503. 20. *purplish green - with*
2. Umbel 3-cleft (with 3 rays). *unequally serr'd at both*
2. E. Umbel 3-rayed, rays dichotomous, involu-Pep'lus.
crets ovate, leaves very entire, obovate, pe-
tioled. *Root fibrous - Herb light green, fruit. branchy fl. small yellow*
Petty Spurge. Cultivated soil. A. 7. 8. Curt.
3. E. Umbel 3-rayed, rays dichotomous, involu-exig'ua.
crets lanceolate, leaves linear. (Pet. crescent-
shaped, fruit smooth—A single flower be-
tween the forks.) *flowers very small yellow*
Dwarf Spurge: Cornfields. A. 7—9. Curt. 215.
Var. 2. Umbel 5-rayed. RELH. E. platyphyl-
los B. Huds.
3. Umbel 5 cleft (with 5 rays).
4. E. Umbel mostly 5-rayed, rays bifid, involu-para'lia. *Herb light green*
crets cordato-reniform, leaves (linear) imbric-
ated upwards. (Plant glaucous.) *12 inches -*
Sea Spurge. Sea shores. P. 8. 9. E. Bot. 195. *Involuc. 10 cut, outer 5 lobes*
5. E. Umbel 5-rayed, rays dichotomous, involu-Portlan'-
crets somewhat cordate, concave, leaves linea-*Rust branchy*
ri-lanceolate, smooth, spreading. (Flow. male, *dica. herb glaucous*
and hermaph. SP. PL. 657.) - *1 foot*
Portland Spurge. Sea shores. A. 5—8. E. Bot. 441. *Involuc. 10 cut, somewhat yellow*
6. E. Umbel 4, or 5-rayed, rays trifid, raylets di-strict'a.
chotomous, involucrets nearly ovate, leaves
lanceolate, serrulated (entire at the base),
smooth, caps. warty, hairless. SYST. NAT.
Ed. 10. p. 1049. SMITH. WITH.
Upright warty Spurge. Woods. A. ? 8. E. Bot. 333.
Obs. This species was omitted in the subsequent Ed., and
confounded with E. verrucosa.
7. E. Umbels 5-rayed, rays trifid, raylets dichoto-heliosco'pia. *Herb light*
green; stem branchy at bottom; leaves bald fl. yellow
Leaves cordate, warty and decaying, the leaves of
aching teeth, also used to raise blisters behind the ear

mous, involucrets obovate, leaves cuneiform, serrated. (Pet. entire, fruit smooth.)

Wartwort. Cornfields. A. 7. 8. Curt.

Stem upright platyphyllos. 8. E. Umbels 5-rayed, rays trifid, raylets dichotomous, involucrets hairy on the keel, leaves serrated, lanceolate, caps. warty.

Long-leaved Corn Sp. Cornfi. A. 6. 7. Jacq. Aus. 376.

Var. 2. β . Huds. Leaves nearly entire, only very slightly serrulated at the base.

4. Umbel many-cleft (with more than 5 rays).

Leaves somewhat hyber'na. 9. E. Umbel 6-rayed, rays dichotomous, involucrets oval, leaves very entire, branches none, caps. warty.

Irish Spurge. Cornfields. P. 8. Ger. 500. 12.

Stem pubescent as 2 feet
terminal, reddish
lobes of bracts blackish
Chara'ci- 10. E. Umbel many-rayed, rays bifid; involucrets perfoliate, emarginate, leaves very entire, stem shrubby. (Fruit hairy, petals entire, purple, flow. male, and hermaph.)

Red Spurge. Woods, &c. S. 6. E. Bot. 442.

Port creeping, - stem 1 foot
Cyparis'- 11. E. Umbels many-rayed, rays dichotomous, involucrets somewhat cordate, branches barren with setaceous leaves, stem-leaves lanceolate. (Pet. crescent-shaped, fruit smooth.)

Woods at Enville. — 5. 6. Jacq. Austr. 435.

Obs. Roth has found the caps. warty.

Stem simple, amygdaloides. 12. E. Umbels many-rayed, rays dichotomous, involucrets perfoliate, orbicular, leaves obtuse. (Peduncles scattered below, umbellate above. E. Bot.)

Wood Spurge. Woods, &c. P. 5. E. Bot. 256.

DODECAGYNIA.

612. SEMPERVIVUM. Cal. 12-parted. Pet. 12.

Caps. 12, many-seeded. *Stamens 12 to 24*

Hard tender, tectorum. 1. S. Leaves ciliate, off-sets spreading. Common House-leek. Roofs, &c. P. 7. Curt. 160.

Leaves many -
round, imbricated & pointed
Obs. When luxuriant, the number of the parts of the flower is greater.

Leaves lanceolate, ciliate at bottom - larger than the stamens
leaves mixed either by themselves or with cream, much used as a cooling applicat. to burns, juice mixed.
with leaves used externally against aptha

Pyrus Malus.



CLASS XII.

ICOSANDRIA.

MONOGYNIA.

620. PRU'NUS. Cal. inferior, 5-cleft. Cor. 5-petalled. *Drupe* with an entire nucleus.

(Cratægus.)

DIGYNIA.

622. CRATÆ'GUS. Cal. superior, 5-cleft. Cor. 5-petalled. *Berry* 2-seeded.

(Prunus insititia.)

TRIGYNIA.

623. SOR'BUS. Cal. superior, 5-cleft. Cor. 5-petalled. *Berry* 3-seeded.

PENTAGYNIA.

625. MES'PILUS. Cal. superior, 5-cleft. Cor. 5-petalled. *Berry* 5-seeded.

626. PY'RUS. Cal. superior, 5-cleft. Cor. 5-petalled. *Pome* 5-celled, many-seeded.

630. SPIRÆ'A. Cal. inferior, 5-cleft. Cor. 5-petalled. *Caps.* many, heaped together.

POLYGYNIA.

631. RO'sA. Cal. 5-cleft. Cor. 5-petalled. Cal. like a berry, many-seeded.

632. RU'BUS. Cal. 5-cleft. Cor. 5-petalled. *Berry* compound.



Dog-rose (Rosa Canina) Several parietal ovaries attached to the wall of a monosepalous accedate calyx, which ultimately forms the fruit.

Prunus cerasus - Bark in decoction used to cure the venereal disease; fruit nauseous, but gives an agreeable flavour to wine and brandy - A Decoction of the fruit used in Dysentery

ICOSANDRIA.

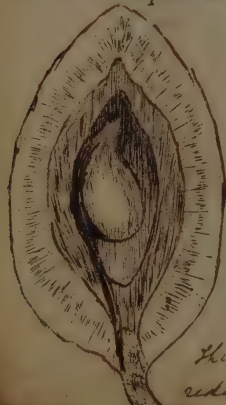
- 635. TORMENTIL'LA. Cal. 8-cleft. Cor. 4-petalled. Seeds 8, awnless.
- 637. DRY'AS. Cal. 5-10-cleft. Cor. 5-8-petalled. Seeds numerous, with a woolly awn.
- 633. FRACA'RIA. Cal. 10-cleft. Cor. 5-petalled. Seeds numerous, upon a receptacle like a berry, deciduous.
- 634. POTENTIL'LA. Cal. 10-cleft. Cor. 5-petalled. Seeds numerous, awnless.
- 636. GE'UM. Cal. 10-cleft. Cor. 5-petalled. Seeds numerous, with a geniculate awn.
- 638. COM'ARUM. Cal. 10-cleft. Cor. 5-petalled. Seeds numerous, upon a fleshy receptacle, permanent.

(XI. *Sempervivum tectorum.* XII. *Spiræa.*)

MONOGYNIA.

- 620. PRU'NUS. Cal. 5-cleft, inferior. Pet. 5. Drupe a nut with rather prominent sutures.

- Pa'dus. 1. P. Flow. racemous, leaves deciduous, 2-glanded at the base on the under side. Birds-cherry. Hedges, &c. S. 5. F. Dan. 205.
- Petioles with 2 glands at the base*
leaves have an oval like one
imbricate blackish, smooth
Cer'asus. 2. P. Umbels somewhat peduncled, leaves ovato-lanceolate, smooth, doubled together. *Drupe black*
Com. Wild Cherry-tree. Woods. T. 5. Hunt. 181.
- maxima. Bird-cherry*
a'vium. 3. P. Umbels sessile, leaves ovato-lanceolate, pubescent underneath, doubled together. Black Cherry-tree. Hedges. T. 5. Blackw. 425.
- domestica.* 4. P. Peduncles mostly solitary, leaves lanceolato-ovate, convolute, branches thornless. P. communis. 8. Huds. *leaves serrate*
I. sp. fleshy furrowed on one side, covered with a glaucous pollen
Common Plum-tree. Hedges. T. 4. Woodv. 85.
- Dark-jewels wide*
leaf furrowed by post
insititia. 5. P. Peduncles in pairs, leaves ovate, somewhat villos, convolute, branches thorny. *leaves serrate*
Bullace-tree. Hedges. T. 4. — *leaves serrate*
- white seed*
spino'sa. 6. P. Peduncles solitary, leaves-lanceolate, smooth, branches thorny. *Whole bearing white leaves*
Sloe-tree. Hedges. T. 3. 4. Woodv. 84.



DIGYNIA.

- 622. CRATE'GUS. Cal. 5-cleft. Pet. 5. Berry inferior, 2-seeded (opening at the top; 1-celled, 1, or more -seeded).

Prunus domestica - Drupe cut lengthways umbilical cord appearing when the nut is to the tip of the stone
The fruit is used to make a saccharine wine to reduce the price of port - Not to occur. Chor.

Pyrus communis Wood light smooth, compact, easily cut and

Pyrus malus

May 3 Pollen 0 there are exactly

20 stamens. a specimen picked near

Richmond allowed the capsule to be readily

separated each appeared to contain two



seeds only.

May 20 The ovary is considerably thickened


the anthers & petals faded, only one seed in each

cell the calyx remains above the thickened ovary.

Purshia corymbosa - Bark in decoction used to cure the venereal disease; fruit nauseous, but gives an agreeable flavor to wine

Crataegus oxyacantha - Pollen  with an evident longitudinal valve May 3^d - the capsules very readily divide into two parts with a style to each, two ascending ovules in each cell as here represented May 20 The ovary appears to contain two cells in each of which one seed and an abortive ovule very visible - 

Purshia

Apr 14 Ovary of this form one large and one small in the ovary - 

May 20 Only one seed, the shell is distinguishable - the external part of capsule altho' both are green - The parts are well represented in page 108

ICOSANDRIA. DIGYNIA. Cratægus. 109

1. C. Leaves ovate, incised, serrated, tomentous underneath. *Twigs tomentous. Flowers white.* *Flowers, aromatic.*
White-beam-tree. M. Woods. T. 5. F. Dan. 302. *Page 113*
2. C. Leaves cordate, 7-lobed, lowest lobes diterrminate'lis.
verging. *3 h. smooth. Leaves unequal, 7 lobed. Tree clothed*
Wild Service-tree. Woods, &c. T. 5. E. Bot. 298. *Austrian.*
3. C. Leaves obtuse, mostly trifid, serrated. F. Ox'yacan'-
Dan. 634. *tha.*
Var. 2. Monogyna. C. monogyna. Lin. Fl. mo- *lin. pinus*
nogynous, segments of the leaves more acute, *Want excellent for*
and spreading. Sheldr. 212. Ger. 1327. 1. *fences. and hard*
— 3. Trigyna. Flow, trigynous. *and tough*
White-thorn. Hedges, &c. T. 5. 6. Hunt. 92.
Var. 4. Glastonbury-thorn. Appendages at the
base of the leaves reniform, toothed, large. *Flowers large*

Obs. The winter blossoms produce no fruit; and the berries
produce plants in every respect similar to the common
Hawthorn. See With. V. 2. p. 439.

TRIGYNIA.

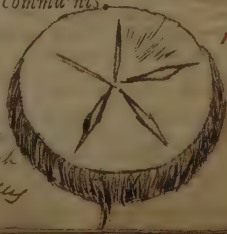
623. Sor'BUS. Cal. 5-cleft. Pet. 5. Berry
inferior, 3-seeded. (Pome 5-celled, open
at the top, 3 (to 5) -seeded, WITH.) *Page 113*
1. S. Leaves pinnate, smooth on both sides. *Pome or berry the size of a*
Mountain Ash. Hedges, &c. T. 5. E. Bot. 337. *seeds two in each cell*
2. S. Leaves pinnate, villous underneath. (Styles *domestica.*
5, fruit turbinate.) See Pyrus domestica. P. 110.
3. S. Leaves semi-pinnate, tomentous underneath. *hybrida.*
(Flow., Corymb, and 3 pistils of S. aucuparia, *Some scarlet.*
stature and foliage nearly of Crat. Aria.) *Mr Gray says it is*
Bastard Service-tree. Mount. T. 5. F. Dan. 301. *with the Pear.*

PENTAGYNIA.

625. Mes'PILUS. Cal. 5-cleft. Pet. 5. Berry
inferior, 5-seeded (1, 2, or 5-celled).
1. M. Unarmed, leaves lanceolate, tomentous un- *german'ica.* *Branches hairy*
nerneath, flow. solitary, sessile, *white, downy at first.* *Fruit*
Medlar T. Hedges. T. 5. Blackw. 154. Ger. 1453. 1. *when quite ripe, is*
626. PY'RUS. Cal. 5-cleft. Pet. 5. Pome in- *inferior*
ferior, 5-celled, many-seeded. *See up to 113. and is dependent on the leaves when young, downy.*
1. P. Leaves serrated, smooth, flow. corymbous. *communes.*
Pear-tree, Woods. T. 4. 5. Blackw. 453. Ger. 1457.



Fig. 1. Pyrus domestica. Pome cut
transversely; cells 5, two abortive.
Fig. 2. The same cut longitudinally
cells cartilaginous; seedlings in each
cell always two. The fertile cells usually
one-seeded; seeds rather large.



Wood used under a good polish; bark
 resinous - Juice of the fruit called *myrica* very acrid
 ashergent, repellent and useful in sprains -

no ICOSANDRIA. PENTAGYNIA. Pyrus.

Leaves ovate acute, when young downy underneath

Mal'us. 2. P. Leaves serrated, umbels sessile.

Fig. in Page 107

Crab-tree. Woods, &c. T. 5. E. Bot. 179.

Var. 2. cultivated. — T. 5. Blackw. 141.

domes'tica. 3. P. Leaves pinnate, leaflets equal, tomentous under-
 neath, serrated towards the point, flow. panic-
 ulated. E. Bot. Sorbus domestica. Lin. Huds.

With. See page 109.

Service-tree. Wire Forest. T. 4. E. Bot. 350.

630. SPIRÆA. Cal. 5-cleft. Pet. 5. Caps. many-
 seeded. (Caps. 4 or more, 2-celled, 2-valv-
 ed, many-seeded.)

Calyx spreading

4 feet sal'icifo'lia. 1. S. Leaves lanceolate, obtuse, serrated, naked,
Leaves alternate flow. doubly-racemous. *bracted leaves*

flowers red with white — Near Hawshead. Mr. DALTON. S. 7. F. Ros. 21.

Filipen'- 2. S. Leaves interruptedly pinnate, leaflets linear-
dula. lanceolate, interrupt. serrated, very smooth,

to be colour, tubers ellip. flow. cymous (with many pistils). *Trubus melleus*

in 12 in. flow. reddish white Dropwort. Mount. pastures. P. 6. 7. E. Bot. 284.

Ulma'ria. 3. S. Leaves interruptedly pinnate, leaflets ovate,
4 feet doubly serrated, hoary underneath, flow. cy-
flowers white mous. (Pist. more than 5.) *Colinus thias*

Com. Meadowsweet. Moist mead. P. 6. 7. Curt. 340.

POLYGYNIA.

in 2 feet pitcher - Shape 631. Ro'sa. Pet. 5. Cal. urceolate, 5-cleft, fleshy,
Fleshy, which forms the seed pod contracted at the neck. Seeds many, his-
When the rose has is injured pid, fixed to the inside of the calyx.

a strong shoot with thorns 1. Germens somewhat globular (rubiginosa).

the original stem is thrown up from the root *arven'sis.* 1. R. Germ. globular, smooth as well as the pedun-
arven'sis. cles, stem and petioles prickly, flow. cymous.

flowers 1 to 15 white flat (Prickles bowed downwards.)

with elliptical White-flow. Dog's-rose. Hedges. S. 6. 7. E. Bot. 188.

flower colour from Var. 2. Only 1-flowered. R. arvensis. β. Huds.

flower var. 2. With. Wild Dog-rose.

about 2 feet spinosis' 2. R. Germ. globular, smooth, peduncles hispid
high, a small ima. (smooth), stem and petioles very prickly.

in the shade - leaflets (Prickles straight, leaflets circular, smooth).

dark green not shining Burnet-rose. Heaths, &c. P. 6. 7. E. Bot. 187.

leaves underneath Var. 2. 3. With. Peduncles prickly, flow. cream-

colour, changing to white. *early buds with greenish*

villo'sa. 3. R. Germens globular, they and the peduncles

leaves above very soft hispid, stem with scattered prickles, petioles

beneath is wrinkled prickly, leaves tomentous. *doubly ovate*

flow. cream deep red Apple-rose. Mount. hedges. S. 6. Park. Par. 419. 7.

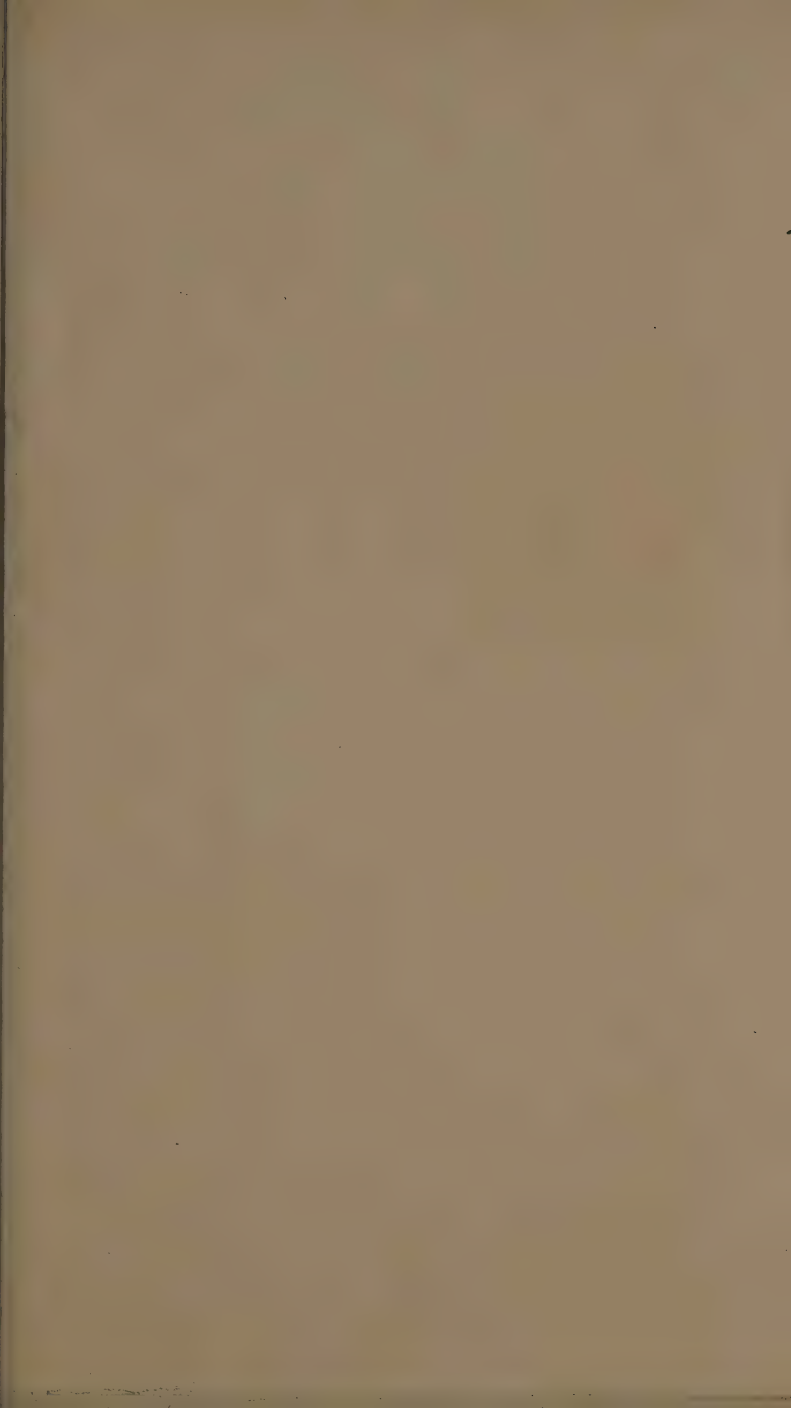
very white with red spots *Fruct. globose & depressed, dark purple the*

Fruct. spinosissima black sometimes blood red - Ripe fruit eaten either raw or

preserved. juice dyed silk and cotton of a peach colour

The fruit contains a large portion of citric acid and sacchar

matter



Mota carolina -

Nebris caesus - May 25 - The ovaries arranged
round a torus containing a
single seed



Rosa canina - Fruit callosities and seeds not in com-
 mon, a description of the roots, and especially of the
 roots mark as an agreeable and expectorating in - dried

ICOSANDRIA. POLYGYNIA. Rosa.

111

Leaves used as a substitute for china tea - Flowers used to
 Var. 2. B. Huds. Wild Briar, with large prickly
 Heps. Calyx persisting. RAY syn. 454. 2.

2. Germens ovate.

4. R. Germens globular (ovate), they and the pe-
 tioles prickly (at the base), prickles recurv-
 ed, leaves rusty underneath. R. eglanteria. with sharp prickles, at base
 Huds. with lower face of leaflets, glandular glands on upper
 Sweet-briar Rose. Hedges. S. 6. 7. F. Dan. 870.

5. R. Germens and peduncles smooth, stem and canina.
 petioles prickly. Stem thorns hooked, petioles prickly, canina
 Dog's-rose. Hedges. S. 6. Curt. 299. leaves bare - young of leaves
 shining as if a mirror - Buds redder than the expanded
 632. Ru'bus. Cal. 5-cleft. Pet. 5. Berry com-
 posed of 1-seeded granulations. (Drupe
 1-celled, clustered, fixed to a conical re-
 ceptacle, so as to resemble a berry.
 WITH.)

1. Shrubby.

1. R. Leaves pinnate, quinate and ternate, stem
 prickly, petioles channelled. Cal. white
 Rasp-berry Bush. Woods. S. 5. 6. F. Dan. 788.

2. R. Leaves ternate, almost naked, lateral leaves
 2-lobed, stem prickly, cylindrical. (Panicle
 few-flowered. Woodw. Peduncles and cal. leaves hairy underneath
 covered with glands. SCHUMER.) petioles white - Fruit dark green.
 Dew-berry Bush. Woods. S. 6. 7. Dod. 742. 2.

3. R. Leaves quinato-digitate, and ternate, stem
 & petioles prickly. (Panicle oblong. Woodw.)
 Bramble. Hedges, &c. S. 6-9. Mill. ill. green. stem angular, armed with
 Var. 2. major. Leaves 3-fingered and 5-finger-
 ed. Segm. of the cal. clasping the fruit. leaves in 3's or 5's
 Woodw. See With. V. 2. 469.

— Hedges, Norfolk. Blackw. 45. 1.

Var. 3. Fruit white. Hedge near Oxford.

2. Herbaceous.

4. R. Leaves ternate, naked, runners herbaceous. saxatilis. flowers, 3 or 4
 (Lower leaves sometimes 5 together. SMITH.) white red - seeds 3 or 4
 Stone Bramble. Mountains. P. 6. F. Dan. 134. leaves pale green serrated

5. R. Leaves ternate, stem unarmed, 1-flowered. arcticus. fruit crimson
 — Highl. of Scotl. P. 5. Curt. Bot. Mag. 132. no runners, fruit hemisph.

6. R. Leaves simple, lobed, stem unarmed, 1-flow-
 ered. (Dioicous, or rather monoicous, as the
 roots of the male and female plants are united
 under ground. SOLANDER.) white - fruit dark red - fruit acid
 Cloud-berry Br. Mountains. P. 5. 6. F. Dan. 1.

anticipates the fruit
 on the leaf

Fragaria vesca. - Bark of the root astringent. fruit fragrant, juicy, universally esteemed; particularly praised as of use in consumption, gravelly complaints, & vicissitudes of the last. 112 ICOSANDRIA. POLYGYNIA. Tormentilla.

635. TORMENTIL'LA. Cal. 8-cleft. Pet. 4. Seeds roundish, naked, fixed on a small juiceless receptacle.

erecta. 1. T. Stem somewhat erect, leaves sessile. (Root-leaves petioled, ternate.) T. officinalis. Curtis and With.

leaflets lanceolate oval deeply toothed Root woody Common Tormentil. Barren past. P. 6-9. Curt. 337.

rep'tans. 2. T. Stem creeping, leaves petioled. 3 leaflets Creeping Tormentil. Woods. P. 6. 7. Pet. 41. 10.

stem decumbent woody - leaves ovate above bald octopet'ala. 637. DRY'AS. Cal. 5-10-cleft. Pet. 5-8. Seeds

shining beneath white tomentous D. Flow. 8-petalled, leaves simple. Mountain Acons. High mount. P. 6-8. E. Bot. 451.

633. FRAGARIA. Cal. 10-cleft. Pet. 5. Recept. of the seeds ovate, berry-like, deciduous.

1. F. Runners creeping. Strawberry. Woods. P. 5. 6. Blackw. 77. 1. Ger. 997. 2. F. Stem decumbent, (runners none) flower-bearing branches flaccid (slender, with a few small leaves, petioles very hairy). Barren Strawberry. Hedge-banks. P. 4. 5. Curt. 173.

634. POTENTIL'LA. Cal. 10-cleft. Pet. 5. Seeds roundish, naked, fixed on a small juiceless receptacle.

1. Leaves pinnate.

1. P. Leaves pinnate, stem shrubby. Shrubby Cinquefoil. Bank of the Tees. S. 6. E. B. 88.

2. P. Leaves pinnate, serrated, stem creeping, pendulous. 1-flowered. Silver Weed. Road sides. P. 6. 7. Curt. 203.

3. P. Leaves pinnate and ternate, stem erect, runners (Stem villous.)

Sides of Craig Wreidhin, Montg. P. 7. Ger. 991.

2. Leaves digitate.

4. P. Leaves quinate, (leaflets) cuneiform, incised, tomentous underneath, stem erect. Silvery Cinquef. Pastures, &c. P. 6-9. E. Bot. 89.

5. P. Leaves quinate; connivent-serrated at the point, stems filiform, procumbent, recept. hirsute. White Cinquefoil. In Wales. P. 7. 8. Ger. 989.

Roots eat like parsnips; leaves mildly astringent, used instead of Tormentil bark in dysentery.

Genum barbarum - Roots flavous, etc. and brewed it for turning sour, as Stomachic, and a good substitute for the Scurvian bark in agues

ICOSANDRIA. POLYGYNIA. Potentilla. 113

6. P. Leaves quinate, stem creeping, pedunc. 1- rep'tans. flowered. *Stem reddish, leaves dull above, beneath hairy, on the*
Obs. The stem strikes roots at the joints, it is thereby distinguished from *Formentilla reptans*, which has a procumbent stem, but does not send out roots. AFZELIUS. *Root striking, antiseptic*
Com. Cinquefoil. Pastures, &c. P. 6-9. Curt. Spongy gums
 7. P. Root-leaves quinate, acutely serrated, retuse, ver'na. stem-leaves ternate, stem declining. *branched, downy*
Spring Cinquefoil. Rocky past. P. 4-6. E.B. 37. Petals golden yellow
 8. P. Root-leaves quinate, serrated, acuminate, au'rea. stem-leaves ternate, stem declining. P. *opaca.*
Huds. leaflets wedge-shaped, edges hairy and toothed at the tip
- Pastures near Pontefr. Yorks. P. 7.8. F.D. 114. Missing above pale as in
Petals acute heart-shaped orange color
 636. GE'UM. Cal. 10-cleft. Pet. 5. Seeds with a jointed awn.
 1. G. Fl. erect, fruit globular, villous, awns hook- *urba'num. Root woody*
ed, naked, leaves lyrate (stem-leaves ternate). Stem branched at top
Common Avens. Woods, &c. P. 5-8. Curt. 113. Flowers term. 2. sol. yellow
 2. G. Flow. nodding, fruit oblong, awns feather- *riva'le.*
ed, twisted. (Pet. retuse, roundish, cunei- Root-leaves lyrate, bipinnate
form, leaves winged. AITON.) Root horizontal - then branched at top
Water Avens. Sides of rivers. P. 6. 7. E.Bot. 106. then leaves simple & ternate
Var. 2. Flowers large, yellow. With the hairy Calyx purplish - Petals
awns of G. riva'le, habit, colour, and size of upright reverse heart-shaped
G. urbanum. SMITH. yellowish purple
 638. COM'ARUM. Cal. 10-cleft. (Segm. alternately smaller.) Pet. 5, less than the calyx. Recept. of the seeds ovate, spongy, persisting. *Leaves pinnate, leaflets* *Flowers pinnate*
 1. COMARUM. *lanceolate, serrated above, woolly* *palus'tre. blackish purple*
Marsh Cinquefoil. Boggy pl. P. 6. 7. E. Bot. 172. (Root cupping - dyes red)
- Sorbus aucuparia* - Wild ash - wood soft, solid, tough, used to prevent witchcraft and enchantment by a piece being buried about a person, or by small cattle being driven thrice a hoop made of it; berries dried, make wine, and being pressed in water, yield an acidulous kind of Perry, the berries are also used as a bait for redwings and fieldfares
- Crataegus* *via* white beam tree - Plants bear coppicing and do not till grass growing under them; timber tough smooth, charcoal used for gunpowder; fruit when rotten like apple
- Genum rivale* - Root *lethargic*, in common use in agues instead of peruvian bark - Use also to cure colic etc

CLASS XIII.

POLYANDRIA.

MONOGYNIA.

1. Flowers 4-petalled.

644. ACTÆ'A. Cal. 4-leaved. Berry 1-celled.
Seeds in a double order.
647. CHELIDO'NIUM. Cal. 2-leaved. A Silique.
648. PAPA'VER. Cal. 2-leaved. Caps. 1-celled,
crowned.

2. Flowers 5-petalled.

660. TIL'IA. Caps. 5-celled, coriaceous, 1-seed-
ed. Cal. deciduous.
673. CIS'TUS. Caps. roundish. Cal. 5-leaved, 2
leaflets smaller.

(*Delphinium Consolida.*)

3. Flowers many-petalled.

653. NYMPHÆ'A. Berry many-celled, with a bark-
like coat. Cal. large.

DIGYNIA.

(XXI. *Poterium.*)

TRIGYNIA.

681. DELPHIN'IUM. Cal. 0. Cor. 5-petalled, up-
permost horn shaped. Nect. bifid, sessile.
- (*Chelidonium hybridum.* XII. *Reseda Luteola.*)

TETRAGYNIA.

(XXI. *Myriophyllum.*)

PENTAGYNIA.

684. AQUILE'GIA. Cal. o. Cor. 5-petalled.
Nect. 5, horn-shaped below.

(*Papaver Cambricum.*)

HEXAGYNIA.

687. STRATIO'TES. Cal. 3-parted. Cor. 3-petalled. Berry 6-celled; within a spathe.

(*Papaver Cambricum.*)

POLYGYNIA.

696. CLEM'ATIS. Cal. o. Cor. 4-petalled. Seeds numerous, awned.

697. THALIC'TRUM. Cal. o. Cor. 4, or 5-petalled. Seeds numerous, somewhat awned, naked.

702. HELLEB'ORUS. Cal. o. Cor. 5-petalled, persisting. Nect. numerous. Caps. many-seeded.

703. CAL'THA. Cal. o. Cor. 5-petalled. Caps. many. Nect. o.

694. ANEMO'NE. Cal. o. Cor. 6-petalled. Seeds numerous.

700. TROL'LIVS. Cal. o. Cor. 14-petalled. Nect. linear. Caps. many-seeded.

699. RANUN'CVS. Cal. 5-leaved. Cor. 5-petalled. Seeds numerous. Pet. with a nectariferous claw.

698. ADO'NIS. Cal. 5-leaved. Cor. 5, or 10-petalled. Seeds many, angular, with a bark-like coat.

(*Nymphæa alba. Papaver Somniferum. XX. Zostera. Arum.*)

MONOGYNIA.

644. ACTÆ'A. Cor. 4-petalled. Cal. 4-leaved. Berry 1-celled. Seeds semi-circular.

1. A. Raceme ovate, fruit berry-like, *nearly glob.* spica'ta. leaves biternately
Herb Christopher. Woods. P. 5. 6. F. Dan. 498. *on the ternately cut*

Root fibrous

lobes ovate, lanceolate

separated - Berry black

Root used in nervous diseases - Herb repellent - Berries

Chelidonium majus - Juice yellow-red, destroys wants and is used for tumors, and ringworm, the jaundice, and the itch; diluted with milk, cures some spots on the eyes.

116 POLYANDRIA. MONOGYNIA. *Chelidonium*.

647. CHELIDO'NIUM. Cor. 4-petalled. Cal. 2-leaved. Silique 1-celled, linear.

- Leaves pinnatifid lobes blunt cusate
 Stems not knickered majus. 1. C. Peduncles umbellate. *Fl. arill. yellow*
 Greater Celandine. Hedges. P. 5-7. F. Dan. 542.
 Calyx a little hairy -
 Glau'rum. 2. C. Pedunc. 1-flowered, leaves embracing the stem,
 sinuated, stem smooth. *Petals reddish. Pericarp hairy*
 Root leaves by rate hairy lobed
 Low leaves embracing
 Yellow-horned Poppy. Sea shore. A. 7. 8. E. Bot. 8.
 cornicula- 3. C. Pedunc. 1-flowered, leaves sessile, pinnatifid,
 stem hispid. *Pericarp hairy*
 Root leaves by rate tum.
 Red Celandine. Sandy cornfields. A. 7. 8. Curtis.
 hispid - *Stem leaves sinuate*
 hybridum. 4. C. Pedunc. 1-flowered, leaves pinnatifid, (segm.)
 linear, stem smooth, siliques 3-valved.
 Leaves dark green sometimes
 bipinnatifid & hispid
 Violet Celandine. Sandy cornf. A. 5. 6. E. Bot. 201.

648. PAPA'VER. Cor. 4-petalled. Cal. 2-leaved. Caps. 1-celled, opening with pores under the persisting stigma.

1. Capsules hispid.

- Stems branched hybridum. 1. P. Capsules nearly globular, protuberant, stem
 slender hispid - leaves 3-furled
 hispid lobes linear notched
 leafy, many-flowered. *2. To be by violet at base*
 Round rough-headed Poppy. Cornf. A. 6. 7. E. B. 43.
 Argemone. 2. P. Caps. club-shaped, stem leafy, many-flowered.
 (Leaves many-cleft, segments reflected at the margin.)
 according. Petals pale scarlet
 Rough-podded Poppy. Cornf. A. 6. 7. Curt. 313.
 maritimum. 3. P. Caps. nearly cylindrical, stem one-flowered.
 With.

— Sea coast, at Weymouth. A. 6. 7. —

2. Capsules smooth.


- Rheas. 4. P. Caps. globular (obovate), stem hairy, many-
 Petals dark scarlet
 with a dark spot at base
 flowered, leaves pinnatifid, incised.
 Corn Poppy. Cornfields. A. 6-8. Curt. 215.
 dubium. 5. P. Caps. oblong, smooth, stem many-flowered,
 with appressed bristles, leaves pinnatifid, in-
 cised. *Leaves broad - Petals pale scarlet*
 Smooth-podded Poppy. Cornfields. A. 6. 7. Curt. 297.
 Var. 2. shaggy. Whole plant very hairy, segm.
 of the leaves incised.—An intermediate plant
 between P. Rheas, and dubium. See With.
 — Pastures, Isle of Wight. A. 6. F. Dan. 902.
 Petals white plain somnif'e. 6. P. Cal. and caps. smooth, leaves embracing the
 stem and marked
 with a dark spot at base
 stem. 1 foot
 cambricum. 7. P. Caps. oblong, stem many-flowered, smooth,
 leaves pinnate, incised. *Flowers beneath*
 slightly hairy; hairs erect
 Root main rib unispid
 Calyx hairy - Petals lemon yellow
 Yellow Poppy. Mount. P. 6-8. E. Bot. 66.

Papaver rhoeas - Petals communicate a fine red colour to water
 and are slightly narcotic
 Papaver somniferum - Capsules in decoction somnifent; seeds only
 nearly used in some cases - also steamed or c. k. yield an oil, 500


Malva sylvestris — Plant. near economy — ^{the head left without corolla}
^{enveloped & kidney shaped} Anthers in a clustered head on a
hollow gynophore which covers the pistil
in a manner extremely curious. Pollen white
large round and covered with spicula. — Pistil
of a single colour completely hidden within the
gynophore, stigma as tow, covered with short hairs
which serve to enlarge the glutinous pollen —
Capsule containing 10 or more cells, round a center
each cell being filled by a kidney shaped erect seed

Elidonium ma - In the yellow seed, deserts waste

Anthers purple, filaments from
a purple scale at the base of each anther
a filament without an anther between
each.

Ant.  at the base is perhaps the chalazium

I dissected some capsules much more advanced
the seeds of which were certainly erect
the cotyledons and radicle were thus situated.

 the fleshy cotyledons being a little spread
apart, the back of the capsule is formed of the
form sigmoidal elongated, which may be easily seen



Tilia platyphyllos - Plant has cutting back stems, appearing coarse lines by maceration - Wood soft without knots, used for carved and turning work - Leaves used as fodder - Flowers on inflexion, antiseptic medium - Fruit affords a bitter substance like chocolate

POLYANDRIA. MONOGYNIA. *Tilia*.

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660. *TILIA*. Cor. 5-petalled. Cal. 5-parted. Berry (Caps.) dry, globular, 5-celled, 5-valved, opening at the base.

1. T. Flow. destitute of a nectary.

europaea.

Var. 1. β . Lin. sp. pl. Leaves cordate, serrated, fruit 4-celled. RAY syn. 473. 1.

Common Lime-tree. Woods. T. 7. Hunt. i. p. 194.

— 2. γ . Lin. Leaves unequally serrated, fruit tomentous; 5-celled. Du Roi. RAY syn. 473. 2.

Small-leaved Linden-tree. Essex. J. B. i. 137.

— 3. δ . Lin. Elm-leaved, seed (fruit) 6-cornered. DILL. in Ray syn. 473. 4.

— At Whitstable in Surry, &c. —

— 4. ϵ . Lin. Leaves softly hirsute, twigs red, fruit 4-cornered. RAY syn. 473. 3.

Red Lime. Stoken-church Wood. —

Obs. It is now distinguished into *T. grandifolia*, and *T. parvifolia*. In the former, according to Schkuhr, the stam. are polyadelphous, and the lobes of the stigma converging; in the latter, the stam. unconnected, and the lobes of the stigma diverging. — In both the number of cells of the caps. varies. PERS.

673. *CISTUS*. Cor. 5-petalled. Cal. 5-leaved, 2 leaflets smaller. Capsule (1—10-celled, 3—10-valved. WITH.).

1. Without stipules, somewhat shrubby.

1. C. Leaves opposite, oblong, petioled, flat, hoary marifolius. Stem underneath. SP. PL. E. BOT. C. anglicus. rather shrubby, procumbent. Lin. Mant. and With. C. hirsutus. Huds. flower racemose small. Hoary dwarf Cistus. On rocks. P. 5. 6. E. Bot. 396. yellow calyx villous.

2. Without stipules, herbaceous.

2. C. Leaves opposite, lanceolate, 3-nerved, rugulatus. Stem 3-angled without bractes. (Stem rough-haired, thicker 4-sided pedicels red, pet. yellow, with a red spot. racemes terminal SCHK.)

Annual Cistus. Past. near Holyhead. A. 6. Curt. one rowed

3. With stipules, herbaceous.

3. C. Spreading, villous, flow. racemose, erect, salicifolius. pedicels horizontal. (Caps. longer than the lius. calyx.)

Willow-leaved Cistus. Past. A. 6. 7. Ger. 1280. 17.

4. With stipules, somewhat shrubby.

4. C. Procumbent, stipules lanceolate, leaves ob- Helian! Petals as long as style. bright bending } racemes 6 angled } soon a touched - Flow. gold-yellow }

oil - Juice of the capsule dried (Eng. opium) c. also extract and Symp. of the dried capsules. Throat the seed, are in

POLYANDRIA. MONOGYNIA. Cistus.

Nymphaea alba Roots, perennial, to cuckets and holes
The nuphar in use put in the perry -
Nymphaea alba - Root bulbous, dyes dark brown; is
sometimes made into bread -
Leaves below themum. long, revolute, rather hairy. (Pet. nearly cir-
lar cloth-like white cular.) including with (young) green
Petals lanceolatus. Dwarf Cistus. Mount. Pastures. P. 6-8. Curtis.
leaves hairy & dotted below 5. C. Procumbent, leaves ovato-oblong, rather hairy,
pet. lanceolate. C. Helianthemum d. Huds.
leaves revolute beneath Nar. petall. C. Near Croydon. S. 7. Dill. el. 145. 174.
olly and white 6. C. Procumbent, leaves oblongo-ovate, hoary, ca-
Petals white lyx smooth; petals serrated. (Fl. white.)
leaves revolute beneath Mountain C. Brean-Downs. P. 7. Dill. el. 145. 172.
553. NYMPHAEA. Cor. many-petalled. Cal. 4, or
5-leaved. Berry many-celled, truncated.
lu'tea. 1. N. Leaves cordate, very entire, cal. 5-leaved,
larger. Lobes of leaf come very close together
like brandy - Yellow Water-lily. Pools, &c. P. 6-8. E. Bot. 159.
all'ba. 2. N. Leaves cordate, very entire, cal. 4-cleft (4-
leaved). Petals elliptical of long floating
capex coloured above leaf lobes imbricate White Water-lily. Ponds, &c. P. 7. 8. E. Bot. 160.
corundish

TRIGYNIA.


681. DELPHINIUM. Cal. o. Pet. 5 (or 6). Nect.
bifid, horn-shaped behind. Siliques 3, or 1.
(Caps. leguminous, mostly 3. GAERTN.)
Consolida. 1. D. 1-capsuled, nect. 1-leaved, stem subdivided,
herbaceous, bald (Germen smooth.) flowers few on loose racemes
in loose Wild Lark-spur. Cornfields. A. 6-9. F. Dan. 683.
leaves acid

PENTAGYNIA.

684. AQUILEGIA. Cal. o. Pet. 5. Nect. 5,
corniculate, (alternate with) amongst the
petals. Caps. 5, distinct, villous.
vulgaris. 1. A. Nectaries incurved (nearly equal to the pet.;
leaf mostly bald all the leaflets petioled, lobes distant, roundish,
rather obtuse. JACQ.)
flowers in periclot, pale Columbine. Woods, &c. P. 6. E. Bot. 297.
alpi'na? 2. A. Nect. straight, shorter than the lanceolate petal.
(Nect. curved, segm. of the leaves linear. HALLER.)
Mountain Columbine. Mount. woods in Westmorel.
Obs. Hudson always doubted whether the British plant was
specifically distinct, and we are assured that he considered
the true specimens of A. alpina from Mount Cenis, as quite
different from any plant he had seen of British growth.
See E. Bot.

Nymphoa lutea - Roots perennial to cucubits and more

Nymphoa lutea - Stamens very many, some erect around the pistil, others the outer ones inverted - as the with two cells connectives running up their base and projecting at the top

Pollen of this flower  of very elegant shape and covered with spicula, when immersed in water they become round. Microgametes are numerous -

Pistil spread out - with 16 stigmas, which communicate with as many cells - the seeds are connected by tubules to the sides of the cells - The petals are very small & there is the resemblance of absolute anthers on the side surface - Sepals 5 coloured

Clematis - *Stems* in infusion used in Decoys, in
diuretic, astringent, and even corrosive -

POLYANDRIA. PENTAGYNIA. Stratiotes. 149

687. STRATIO'LES. *Spathe* 2-leaved. *Perianth*
3-cleft (or 3-leaved). *Pet.* 3. *Berry* 6-
celled, inferior.

1. *S.* Leaves ensiformi-triangular, ciliate with *Alci'des*
prickles.

Fresh-water Soldier, Pits, &c. P. 6. 7. *E. Bot.* 379.

Obs. Lin. found all the flowers of the Swedish plants, which
he examined, hermaphrodite, but informs us, that they
were found dioicous in Germany by Bergen, Zinn, and
Fabricius; and that Schreber observed the anthers to be
barren in the herm. flowers. The bodies, in the cir-
cumference of the flower, are considered as nectaries by
Roth.

POLYGYNIA.

696. CLEM'ATIS. *Cal.* o. *Pet.* 4, rarely 5, or
6. *Seeds* tailed. (*Styles* permanent. *Caps.*
many, tailed. *Recept.* a knob. *WITH.*)

1. *C.* Leaves pinnate, leaflets cordate, climbing.
Traveller's Joy. Hedges, &c. S. 7. 8. *Curt.* 244.

697. THALIC'TRUM. *Cal.* o. *Pet.* 4 or 5. *Seeds*
without tails. (*Caps.* many, rather beak-
ed. *WITH.*)

1. *T.* Stem undivided, naked, raceme simple, ter-
minating. (*Stam.* 8—12. *Pist.* 4—8.) *Cor.* 2-lobed, *Leaves*
Mountain Rue-weed. Moist rocks. P. 6. *E. B.* 262.

2. *T.* Stem leafy, (leaflets acute, 3-cleft,) furrow-
ed, panicle many-fold, erect.

Meadow Rue-weed. Meadows. P. 6. *E. Bot.* 367.
Var. 2. Lobes of the leaves narrower and more
wrinkled. *LIGHTF.* p. 285. *H. ox.* ix. 20. 3.

3. *T.* Leaves 6-parted, flow. cernuous. (Leaves
tripinnate, leaflets 3-cleft, panicle large, ex-
panding, flow. on crooked pedunc. *WITH.*)

Less Rue-weed. Meadows. P. 7. 8. *E. Bot.* 11.
4. *T.* Leaves many-parted, flow. cernuous, flower-
bearing branches axillary, 2, or 3 together.
(Leaves dark green above, glaucous under-
neath. *JACQ.*)

— *M. mead.* Yorksh. &c. P — *Jacq. Aust.* 120.

702. HELLEB'ORUS. *Cal.* o. *Pet.* 5, or more.
Nect. 2-lipped, tubular. *Caps.* many-
seeded, rather erect

1. *H.* Stem hind, branches leafy, 2-flowered, vir'idis.

Helleb. med. - *Leaves* infused in beer, used as a hepatic
tactic in epidermic fevers, are violently purgative and
emetic.

Root & stem used
as a seton by farmers.

180

POLYANDRIA. POLYGYNIA, Helleborus.

Root leaves grow larger than the stem after flowering
Root leaves pedately cut leaves digitate. (Stem many-flowered, flow.
stem leaves opposite solitary, green, spreading. Pist. 3—5. Segm. of
palmately parted the leaves deeply serrated.)
Flowers green, drooping. Green Hellebore. Woods. P. 3—5. Curt. E. Bot. 200.
foetidus. 2. H. Scape (stem) many-flowered, leafy; leaves pe-
date. (No leaves towards the root.) Flow.
converging, green, purplish towards the points.
Bear's-foot. Meadows, &c. P. 4. Woods. 19.

793. CAL'THA. Cal. o. Pet. 5. Nect. 7. Caps.
many, many-seeded.

1. a 10 inch palustris. 1. CAL'THA. Leaves cordate, nearly entire, quashed
to be upright, peduncles Marsh Marigold. Moist meadows, &c. P. 4. 5. Curt.
694. ANEMONE. Cal. (generally) o. Pet. 6—9.
Seeds numerous.

1. Pulsatilla, peduncle involucred, seeds tailed.

Root leaves praten'sis. 1. A. Petals reflected at the point, leaves bipinnate.
finely divided. fl. purple Dark-flowered Anemone. Pastures. P. 4. Woods. 148.
Pulsatilla. 2. A. Petals straight, leaves bipinnate (incised).
Pasque Flower. High past. P. 4. 5. E. Bot. 51.

2. Anemoneoides, flower naked, seeds without tails.

Leaves tomentose nemorosa. 3. A. Seeds acute, leaflets incised; stem 1-flowered.
cut segments 3 cut-lanceolate Wood Anemone. Woods. P. 4. 5. Curt. E. Bot. 355.
sometimes clothed yellow. fl. white, rose red, blue, or purple.
ranunculus. 4. A. Seeds acute, leaflets incised, pet. roundish,
stem mostly 2-flowered. (Pedunc. with 2
leaflets.)

Root leaves tor-des. Yellow Anemone. Hedges, &c. P. 5. Ger. 383. 1.
3 cut segments slightly Var. 2. Stem flexuose at the base, 1-flowered, pe-
dunc. naked, cor. 5-petalled. WITH. F. Dan.
3 cut - fl. gold yellow. 140.

Leaves 3-lobed apenni'na. 5. A. Seeds acute, leaflets incised, petals lanceolate,
cut segments lanceolate numerous. fl. upright, light blue.
Root black - pedicels villous Mount. Anemone. Woods, &c. P. 4. Curt.

Root leaves foliosus black 700. TROL'LUS. Cal. o. Pet. about 14. Caps.
in bundles - stem 2 feet very numerous, ovate, many-seeded.



Flowers pink europæus. 1. T. Corol converging, nect. as long as the stam.
only, then yellow Globe Flower. Moist woods, &c. P. 5. 6. E. Bot. 28.



Leaves pedately, palmately many cut 699. RANUNCULUS. Cal. 5 (or 3) leaved. Pet.
5, (2—8) with a melliferous pore (or scale)
on the inside of the claws. Seeds naked.


1. Leaves simple.

Ficaria. 1. R. Leaves cordate, angular, petioled, stem 1-

Herb in flower supposed to make the butter yellow
but is poisonous to cows - unexpanded flowers pickled
and used for capers
Anemone nemorosa - Plant acid, inducing the dysentery but
not the head ache, biliousness &c. &c. and rheumatism

Caltha Pollen. Some grains appear round and others appear of the following shape  with a luminous spot in the center - Seeds arranged in a double row on the inner junction of the two valves of the capsule - 25 The capsules are much enlarged, and all of the oracles have been fertilized or nearly so - Seed of this shape rather thickened at the extremity 

Anemone - Pollen round & smooth
Apr 20. Capsules of this form  arranged round a torus independent ovule. In bud
Apr 16 - The corolla much enlarged, upwards, the style perceptibly shortened, the capsule enlarging with it, as to the seed - These are plain and ovoid, without any unevenness of figure from raphe or otherwise 

Pan. incanescens - Pollen white. Capsules arranged round a torus with styles shorter than in *Anemone* - They are rather cartilaginous when cut this each contains a small accend ovule 

Picaria Pollen quite round

POLYANDRIA. POLYGYNIA. Ranunculus. 121

flowered. (Cal. 3-leaved. Pet. 8.) *Ficaria* leaves long, petioled
verna. Huds. flowers yellow, becoming whitish at tip

Common Pilewort. Meadows, &c. P. 4. Curt.

2. R. Leaves ovato-lanceolate, petioled; stem declining. — *Flam'mula*. Stem 2 feet
 leaves bold — flowers
 rich, shining yellow

Less Spearwort. Bogs, &c. P. 6—9. Curt.

Var. 2. β . Lin. sp. and Huds. Leaves serrated.

— 3. γ . Huds. Leaf broader, resembling that
 of Plantago, hairy at the margin. DILL. in
 Ray syn. 251. Pluk. 312.

3. R. Leaves lanceolate, stem erect.

Lin'gua. Leaves slightly
 serrate, sepals ready
 and raising the stem

Great Spearwort. Bogs. P. 6. 7. E. Bot. 100.

Obs. The flower very large, stem tomentous, leaves much
 longer in proportion to their breadth, and more pointed
 than in *R. Flammula*.

4. R. Leaves lanceolato-linear, undivided, stem gramineus.

erect, very smooth, few-flowered. (Flow. yellow, small, root tuberous.)

North Wales. — Bauh. hist. iii. 866. 3.

5. R. Leaves linear, stem creeping. — (A var. of *R. rep'tans*. Stem creeping
Flammula?) — *Flam'mula*? leaves small yellow, smothering a root at each
 joint. Stem & leaves
 thread like

Nar.-leaved C. Sides of lakes. P. 7. 8. Lf. i. Front.

2. Leaves dissected; and divided.

A. Not uniform.

6. R. Root-leaves reniform, crenate, incised, stem-auric'lonus.
 leaves digitate, linear, stem many-flowered.

Goldilocks. Woods, &c. P. 4. 5. Curt.

7. R. Lower leaves palmate, higher digitate, fruit scelera'tus. flowers scarcely
 oblong. — *Herb. Sale* green, stem thick fleshy

Round-leav. Water-crowfoot. Ditches. A. 5. 6. Curt. Root leaves petioled 3 inches

8. R. Submersed leaves capillary, those above wa-aquat'ilis.

Water-crowfoot. Ponds. P. 5—7. E. Bot. 101.

Var. 2. large-flowered. None of the leaves ca-
 pillary.

— 3. *circinnatus*. β . Lin. δ . Huds. All the
 leaves capillary, outline roundish.

— 4. *diffusus*. γ . Lin. β . Huds. All the leaves
 capillary, outline irregular. Gerard 679.

— 5. *fluvialis*. δ . Lin. γ . Huds. All the
 leaves capillary, segments very long, parallel.
 HALL. F. Dan. 376. See With.

9. R. Calyxes patulous, pedunc. cylindrical, leaves
 3-parted, segm. many-cleft, upper leaves
 linear. flowers often double

Butter-cups. Pastures, &c. P. 6. 7. Curt.

Ranunculus flammula — Herb acid poisonous to sheep
 the distilled water is sweet, acting violently

Ranunculus acris. - Herb acrid, poisonous to sheep.
 Jowers of the juice killed a dog in 4 minutes

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POLYANDRIA. POLYGYNIA. *Ranunculus*.

Var. 2. Peduncles flattened, flowers smaller. WITH.

B. Uniform. (*aquatilis*.)

- leaves briefly parvisflo- 10. R. Seeds muricated (with hooked tubercles);
 pinnated upper rus. leaves simple, lacinated, (segm.) acute, (toothed)
 leaves lanceolate hairy, stem diffuse. *Creeping down leaves*
Fls. small yellow - Small-fl. Crowf. Cornfields, &c. A. 5.6. E. Bot. 120.
 leaves fleshy. hederace- 11. R. Leaves roundish (or reniform), 3-lobed, very
 flat, white us. entire, stem creeping. *Creeping*
Ranunculus bulbosus 12. R. Cal. reflected, pedunc. furrowed, stem erect,
 petaloid 3 cut-lobes 3 cut many-flowered, leaves compound (root bulbous).
leaves lobes a little lobed Bulbous Crowfoot. Meadows, &c. P. 5. Curt.
 18 inches high hirsut- 13. R. Root fibrous, stem hairy, calyx pimpled, hairy,
 in var. 3. *hardest hairy* acuminate, at length reflected. CURT.
 repens. 14. R. Cal. patulous, peduncles furrowed, stolons
 3 cut segment-creeping *Creeping*
leaves deeply toothed Creeping Crowfoot. Meadows. P. 6-8. Curt. 211.
leaves deeply lobed R. Seeds prickly, upper leaves decompound, linear.
leaves lobed at the tip - root leaves Corn Crowfoot. Cornfi. A. 6. Mart. 56. E. Bot. 135.
 3. *erect - fls. small* 698. ADO'NIS. Cal. 5-leaved. Pet. (5 or) more
 than 5, without a nect. Seeds naked.
fls. peduncle small dark red *activallis*. 1. A. Fl. 5-petalled, fruit ovate.
autumnalis. 2. A. Fl. 8-petalled (pet. obcordate), fruit nearly
 cylindrical.
lis. Pheasant's-eye. Cornfi. A. 5. 7. Curt. 135. E. B. 308.

Ranunculus acris - Stem herbaceous? leaves bilobately cut
 not cut - Root caudex-like fibres thick oblong
 cylindrical - Stem 3 feet high purplish - Petals crimson
 sometimes pale red and white - Seeds globular red
 [Used in diff. with the *Ranunculus officinalis* and preferred by
Ranunculus officinalis - Stem herbaceous? - Leaves bilobately cut
 lobes bald oblong, middle lobe cut, side lobes not cut
 Stem greenish - Root made into a pickle case, used
 against the epilepsy in children, also given inwardly
 to adults; seeds used in nightmar - Symp. of the
 flower anti-epileptic

CLASS XIV.

DIDYNAMIA.

GYMNOSPERMIA.

1. Calyxes mostly 5-cleft.

722. LEONU'RUS. *Anth.* sprinkled with bony (shining) dots. *cor.* upper lip hairy.
714. GLECO'MA. *Anth.* each pair forming a cross.
713. MEN'THA. *Filaments* distant, straight. *Cor.* nearly equal.
706. TEU'CRUM. *Cor.* upper lip 0, but (the upper side of the tube) 2-parted.
705. A'JUGA. *Cor.* upper lip shorter than the stamens.
- GALEOB'DOLON. *Cor.* upper lip entire, arched; lower lip 3-cleft; segments broad, acute. *Anth.* fleshy on the back. WITH. HUDS.
718. BETON'ICA. *Cor.* upper lip flat, ascending, tube cylindrical. *Stam.* as long as the mouth of the tube.
716. LAM'IUM. *Cor.* lower lip with a setaceous tooth on each side.
717. GALEOP'SIS. *Cor.* lower lip with 2 teeth above.
719. STA'CHYS. *Cor.* lower lip reflected at the sides. *Stam.* turned to the sides, when deflorate.
710. NEP'ETA. *Cor.* lower lip crenate. *Throat* with the margin reflected.
720. BALLO'TA. *Cal.* 10-striated. *Cor.* upper lip arched.
721. MARRU'BIUM. *Cal.* 10-striated. *Cor.* upper lip straight.

(II. *Verbena officinalis.* XIV. *Origanum.* *Me-lissa Nepeta.*)

DeCandolle has founded the characters of these two orders on the structure of the ovary - In the *Gymnospermia* the fruit is formed of 4 small berries placed in the bottom of the calyx, which he considered as 4 red seeds - The *Angiospermia* have a capsule containing a more considerable number of seeds

DIDYNAMIA.

2. *Calyxes 2-lipped.*

734. SCUTELLA'RIA. *Cal.* when in fruit covered with a lid.
 727. THY'MUS. *Cal.* throat (small) closed with hairs.
 735. PRUNEL'LA. *Filaments* all forked at the end.
 726. ORIGA'NUM. *Strobile* collecting the calyxes. (*Calyxes* forming an imbricated cone. WITH.)
 725. CLINOPO'DIUM. *Involucre* collecting the calyxes.
 731. MELIT'TIS. *Cal.* larger than the tube of the corol. *Cor.* upper lip flat, entire. *Anth.* crossed.
 728. MELIS'SA. *Cal.* angular, scariose, upper lip ascending.

(Teucrium.)

ANGIOSPERMIA.

1. *Calyxes bifid.*

779. OROBAN'CHE. *Caps.* 1-celled. *Cor.* nearly equal, 4-cleft. *Gland* under the base of the germen.

2. *Calyxes 4-cleft.*

743. LATHRÆ'A. *Caps.* 1-celled. *Cor.* personate. *Gland* under the germen.
 739. BART'SIA. *Caps.* 2-celled. *Cor.* personate. *Cal.* coloured (not in our species).
 741. EUPHRA'SIA. *Caps.* 2-celled. *Cor.* personate. *Anth.* lower with thorns on one lobe.
 740. RHINAN'THUS. *Caps.* 2-celled. *Cor.* personate. *Caps.* compressed.
 742. MELAMPY'RUM. *Caps.* 2-celled. *Cor.* personate. *Seeds* 2, gibbous.

3. *Calyxes 5-cleft.*

776. LIMOSEL'LA. *Caps.* 1-celled. *Cor.* campanulate, regular. *Seeds* numerous.
 756. SCROPHULA'RIA. *Caps.* 2-celled. *Cor.* resupinate. *Lip* with the intermediate segment more inward.

Glecoma hederacea - Herb ashy-venter, vulnerary, pectoral
used to cure malt liquors. powder of leaves used in cough
Consumption, and jaundice, juice as an antiscorbutic
beverage

DIDYNAMIA. GYMNOSPERMIA. Leonurus. 125

775. SIBTHOR'PIA. Caps. 2-celled. Cor. rotate. Stam. 2 and 2, approximate.

758. DIGIT'ALIS. Caps. 2-celled. Cor. campanulate, on the under side ventricose. Stam. declining.

750. ANTIRRH'NUM. Caps. 2-celled. Cor. personate, with a prominent nectary underneath.

746. PEDICULA'RIS. Caps. 2-celled. Cor. personate. Seeds coated.

774. LINNÆ'A. Berry 3-celled, dry. Cor. campanulate. Cal. superior.

GYMNOSPERMIA.

722. LEONU'RUS. Anth. sprinkled with shining dots. (Cal. 5-cornered. Cor. upper lip shaggy, concave. E. Bot. Lower lip 3-cleft.) *Tube of Corolla as long as calyx*
Antheri sprinkled with shining dots - Flowers

1. L. Stem-leaves lanceolate, 3-lobed. *lower leaves wide* **Cardi'acg.**
Motherwort. Hedges, &c. B. 6—8. E. Bot. 286.

Obs. The shining dots are not peculiar to this genus, and therefore do not sufficiently characterize it. They are met with, according to Batsch and Schkuhr, in several species of plants belonging to this order. See Persoon.
Shaded - from below with bent back. Corolla white and woody on the inside. red fringed on the inside - Anthers spotted with white.

714. GLE'COMA. Anth. each pair in the form of a cross. Cal. 5-cleft. *Corolla lobes of a cross. Tube twice as long as the calyx*
anthers joint with a stigma

1. G. Leaves reniform, crenate. **hederacea.**
Ground Ivy. Hedges, &c. P. 4. 5. Curt. 143. *Herb downy, stem creeping and flower heads in whorls or together - in*
Var. 2. *sepium.* Stem elongated, somewhat climbing, leaves reniform, smooth.
— 3. *mutibata.* Smaller, without anthers.
See Pers.

— 4. B. Huds. Larger, more erect, and hirsute. Vaill. 6. 4. Ger. 704. 6.

713. MEN'THA. Cor. nearly equal, 4-cleft, the broadest segment emarginate. Stam. erect, distant.

1. Flowers in spikes.

1. M. Spikes oblong, leaves (whitish) oblong, serrated, tomentous, sessile, stem longer than the corol. (Spikes oblong, with (long) bractes, leaves sessile, lanceolate, serrated, acute, tomentous, hoary (underneath), with *styles 3-ir.*
stem purplish at bottom - This is called by Gely villosa

Leonurus cardiaca - Antispasmodic, the decoction used in the treatment of the heart - hysteria - also given to cattle against the cough and fever -

Mentha columbifolia - Odour peculiar, stimulant. of great use in chlorosis, and in removing the dull lagor after epileptic fits

126 DIDYNAMIA. GYMNOSPERMIA. *Mentha*.

reticulated veins, *stam.* shorter than the corol, smell goatish. *M. villosa prima*. Sole.) *Menthastrum*, &c. RAY syn. 234. 5.

Long-leav. Horse-m. Ditches. P. 7. Sole 1. *J. B.* iii. 222.

Obs. Hudson has observed the *stam.* of equal length with the corol. Mr. Sole has never found them longer. See *Mentha Britannica*, an ingenious work lately published, in which the British species are well described, and admirably figured.

villosa. 2. *M. Spike* (spikes) oblong, leaves sessile, ovato-lanceolate, serrated, acute, villous, *stam.* shorter than the corol. HUDS. *M. villosa secunda*. Sole. *M. spicata* &c. DILL. in Ray 233. 2. and 234. 3. A var. of *M. sylvestris*?

Com. Horse-mint. Moist pl. P. 8. Sole. 2. *Ger.* 684. 3.

Obs. The spikes are shorter, and more dense, the bractes capillary, indistinct, the leaves smoother above, villous underneath, the stem reddish, the odour resembling *M. viridis*. See Sole.

[aromatic] *rotundifolia*. 3. *M. Spikes* oblong, leaves roundish, wrinkled, crenate, sessile. (Bractes lanceolate. E. Bot. 446.—Spikes oblong, leaves wrinkled, sessile, downy, crenato-dentate, lower ones oblong, obtuse, upper ones rounded, veins reticulated, *stam.* longer than the corol. *M. sylvestris*. Sole.) *Menthastrum*, &c. RAY syn. 234. 6.

Round-leav. *M.* Moist pl. P. 8. Sole 3. *J. B.* iii. 219. Var. 2. Leaf curled, partly white, partly ash-coloured, or greenish. *β.* Sole. *Ger.* 684. 4.

Var. 2. Leaf curled, partly white, partly ash-coloured, or greenish. *β.* Sole. *Ger.* 684. 4.

alopecuroides. 4. *M. Spikes* oblong, dense, bractes long, filiform, flow. red, leaves sessile, roundish, wrinkled, toothed, villous, nerves transverse, veins reticulated, *stam.* as long as the corol, stem erect, hirsute, odour resembling *M. viridis*. *M. rotundifolia*. Sole.

Fox-tailed *M.* Moist places. P. 8. Sole 4. *Ger.* 681.

Obs. The capillary bractes are so much longer than the flowers, as to make the spike resemble a fox's tail. From this circumstance the spec. name *alopecuroides* has been chosen, a new name being necessary, after restoring to the former species the name given it by Lin. The same liberty has been taken with some of the names, which consist of two words, used by Mr. Sole.

viridis. 5. *M. Spikes* oblong, leaves lanceolate, naked, serrated, sessile, *stam.* longer than the corol. LIN. SOLE. *M. angustifolia* &c. RAY hist. i. 532.

Spear-mint. Watery pl. P. 8. Sole 5. *Ger.* 680. 3.

Obs. When cultivated the leaves vary in breadth.

Flower - Odour aromatic acid & a camphor of the leaves as well as distilled water, and distilled spirit prevent and stop nausea and vomiting - leaves used also as carminative to season flatulent food; made into Poultices or in fomentations, used to dissolve agglutinations of milk in the breast with which milk leaves are mixed not smelling so strong as here with

6. *M.* Spikes oblong, interrupted, leaves broad, *palustris*.
ovate, acute, serrated, hirsute, lower ones ob-
long, nerves reddish, stam. shorter than the
corol, stem erect, hirsute, smell goatish.
SOLE. *M. sylvestris* β. Huds. *Menthastri*

&c. RAY syn. 234. 4. Marsh-mint. Ditches. P. 9. Sole 6. Ger. 685. 5.

7. *M.* Spikes oblong, interrupted, leaves lanceo- *officinalis*.
late, smoother, finely serrated, petioled, stam.
as long as the corol, stem erect, brown, odour
very grateful, like pepper. SOLE. *M. pi-*
perrita var. 2. With.

True Pepper-m. Moist pl. P. 8. Sole 7. Pet. 13. 10.

Obs. This species is named *M. piperita officinalis* by Mr.
Sole.

8. *M.* Spikes oblong, broader, interrupted, leaves *hircina*.
broad, ovate, acute, petioled, serrated, some-
what hirsute, nerves white, stem erect, rigid,
somewhat branched, whitish red, stam. shorter
than the corol, odour like pepper. SOLE. *lower whorl very*
round -
rather viscid, ungrateful

Savage Pepper-m. Watery places. 9. Sole 24.

Obs. This species differs from the preceding one in being
much larger and coarser, and having a disagreeable goat-
ish smell of Pepper-mint. It is named *M. piperita syl-*
vestris by Mr. Sole.

2. *Flowers in heads.* (*Sisymbria*.)

9. *M.* Flow. capitate, leaves ovate, petioled, stam. *piperita*. *Spikes short*
shorter than the corol. (Stem and branches *calyx quite bald at base*
flexuose.) LIN. HUDS. WITH. *M. piperita* *Stamens sacred*
vulgaris. SOLE. *Mentha* &c. RAY syn. 234. 7. *leaves dark green, pale*
Com. Pepper-m. Watery pl. P. 9. Sole 8. Pet. 13. 11. *herb - black pimples*

10. *M.* Flow. capitate, leaves ovate, serrated, odorata. *Herb much*
smoother, petioled, nerves branched, red, stem *bald, reddish, calyx*
red, smoother, stam. shorter than the corol, *slender, perisperm*
smell very agreeable. SOLE. *M. aquatica* γ. *traced with like*
Huds. *Mentha* &c. DILL. in RAY 233. 8. *odour like orange*

Bergamot-m. Moist places. P. 7. Sole 9. Ray 10. 1.

11. *M.* Flow. capitate, leaves ovate (or cordate), *hirsuta*. *terminal whorl*
serrated, somewhat sessile (lower ones on *round - calyx hirsute*
short petioles, upper ones sessile), pubescent, *on every side - leaves*
stam. longer than the corol. SYST. veg. *pubescent - stem hirsute*
WITH. E. BOT. *M. aquatica minor*. SOLE. *hairs, deflected, purple*
M. aquatica β. & γ. Huds. *Sisymbrium* &c. *to the stem, - peduncles very hirsute, hairs white*
RAY syn. 233. 7. *calyx perisperm*

Small Water-m. Moist pl. P. 8. Sole 10. J. B. iii. 224.

12. *M.* Flow. capitate, leaves ovate, serrated, pe- *aquatica*.
tioled, stam. longer than the corol, SYST.

veg. HUDS. WITH. RAY syn. 233. 6. *M. aquatica major*. SOLE.

Great Water-m. Watery pl. P. 8. SOLE 11. Ger. 684. 1.

tomento'- 13. *M.* Spikes glomerate, stem erect, villous, un-
sa. branched, leaves cordato-ovate, serrated, petio-
led, hoary, softer, stem shorter than the corol,
odour aromatic. SOLE.

Hoary Water-mint. Swampy places. — 9. —

Obs. This is in its appearance so totally different from the two preceding species, that Mr. Sole thinks it may with propriety be made a distinct Mint. He has given it the name of *M. aquatica tomentosa*, but has not figured it.

3. Flowers in verticils.

arven'sis. 14. *M.* Flow. verticillate, leaves ovate, acute, serrated, stem as long as (or shorter than) the corols.
calyx curved with hairs
stamens shorter than corol
leaves not serrated top &
bottom more or less hairy. SYST. veg. SOLE. Stems diffuse. HUDS. *Mentha* &c. RAY syn. 232. 1. DILL. in R. 232. 2.
Corn-mint. Cornfields. P. 7. SOLE 12. Ger. 684. 2.

Var. 2. Erect, leaves (smoothish) narrow, stem reddish, odour agreeable. β . SOLE. Blackw. 131.

— 3. Larger. Verticils and flow. large, leaves (ovate) broader, stem longer than the corol, odour agreeable. γ . SOLE.

pra'cox. 15. *M.* Flow. verticillate, stem erect, nearly naked, whitish, branches shorter, erect, leaves elliptico-lanceolate, petioled, serrated, smoother, nerves white, stem shorter than the corol, odour like *Acorus Calamus*. SOLE. *M. austriaca*. Jacq. P.

Early-flow. *M.* Banks of rivers. — 6. SOLE 13.

agres'tis. 16. *M.* Flow. verticillate (cal. hairy), stem erect, hirsute, branched, leaves petioled, curled, wrinkled, serrated, villous, roundish, stem shorter than the corol, odour aromatic. SOLE. *M. arvensis* β . HUDS. *M. arvensis* &c. RAY syn. 232. 3.

Field-mint. Cornfields. P. 7. SOLE 14.

gen'tilis. 17. *M.* Flow. verticillate, leaves ovate, acute, serrated, stem shorter than the corol. LIN. WITH. E. BOT. (Flow. verticillate, bractes (upper leaves) long, acuminate, sessile, stem erect, branched, brown, (lower) leaves oblongo-lanceolate, somewhat petioled, serrated, smoother, nerves brown, stem shorter than the corol, odour like Basil. SOLE.) *M. rubra* & *gentilis*. HUDS.

Cardiac Mint. Rubbish. P. 7. SOLE 15. Ger. 680. 4.

Obs. The leaves ovato-lanceolate, acute, nearly sessile, scarcely hairy, pedunc. perfectly smooth, calyx-teeth hairy. E. BOT. 449.

18. *M.* Flow. verticillate, verticils fewer, smaller, leaves petioled, ovato-lanceolate, serrated, rather hirsute, nerves white, hairy, stem erect, hairy, somewhat shrubby, whitish red, rather branched; branches short, erect, stem shorter than the corol, odour agreeable. *SOLE*. *M. rubra vulgaris*. *HILL*. B. Herbal. 352. *gracilis*. Stem rough sided. Leaves light green. Both sides, slightly hirsute. Calyx tubular, bell-shaped. Purple. — Odour like that of *M. viridis*.

Slender Mint. Banks of rivers. — 8. *Sole* 16.

Obs. The bractes, or upper leaves are petioled, and broader than in *M. gentilis*.

19. *M.* Flow. verticillate, vertic. fuller, smaller, leaves oval, obtuse, finely serrated, somewhat petioled, wrinkled, rigid, hirsute, stem-leaves dependent, stem hirsute, erect, branched above, simple below, pale greenish brown, flow. purplish blue, stem shorter than the corol, odour resembling pepper-mint, *SOLE*. *pratensis*. Stem branched at top, changing to simple. Pale green to dark brown. Leaves harsh, wrinkled, hairy, deeply veined. Hanging down close to the stem.

Meadow-mint. Moist places. — 8. *Sole* 17.

20. *M.* Flow. verticillate, stems herbaceous, diffuse, smoothish, red, leaves ovate, acute, serrated, petioled (petioles short), stem shorter than the corol, odour agreeable. *SOLE*. *M. fusca*. *RAY* syn. 232. 5. *rubra*. Stem and calyx quite bald — leaves dark green, shining — flowers rather large — bald.

Com. Red-mint. Brooks. — 7. *Sole* 18. *Park*. 31.

Obs. *M. rubra*, *gentilis*, and *gracilis*, are all included under *rubra* by *Huds.*, but Mr. *Sole*, having found them distinct after 20 years cultivation, has been induced to give them as three distinct species.

1. *M.* Vertic. lateral, (all) peduncled, leaves petioled, ovate, acute, serrated, variegated, pubescent, stem erect, red, smoother, somewhat branched, stem shorter than the corol, odour agreeable. *SOLE*. *variegata*. Leaves variegated with yellow and white. Pedicels rarely &c. &c. Slightly hairy.

Window-m. Waste pl. P. 8. *Sole* 19. *H. ox.* xi. 7. 5.

2. *M.* Vertic. lateral, sometimes peduncled (lower peduncled, upper sessile), stem erect, branched, hirsute, reddish, leaves broad, ovate, acuminate, petioled, finely serrated, smoother above, villous underneath, nerves stronger, branched, stem longer than the corol, odour disagreeable, like *M. sativa*. *SOLE*. See *Ray* syn. 232. 4. the hirsute plant. *riva'lis*. Stem 3 feet long, leaves long, scarcely hairy, hirsute.

Brook-mint. Brooks. — 8. *Sole* 20.

Var. 2. With the habit, and smell of *Calamint*. *SOLE*.

— 3. Lower leaves rounder, upper concave

Antiquum - *Decommodum* antiharmodii used in hysterical disease
 in Infusion or as a distilled water - Symp. of the juice used in vomiting
Tenuissimum Chamodys - Herb dumetum emine sopor. *Idiophoretu*
 its decoction in wine recommended in Gout
 130 DIDYNAMIA. GYMNOSPERMIA. *Mentha*.

(ovate), stem branched below, simple above,
 stam. shorter than the corol, odour like Lemon
 Thyme. 7. Sole.

— 4. Leaves smaller, rounder, hoary, stem
 branched, branches erect, longer, villous, red-
 dish, smell like Marum. 8. Sole.

stilla close together
stamens as long as the
corolla [odour like *Marjoram*

sativa. 23. M. Flow. verticillate, (stem erect, somewhat flex-
 uose above) leaves ovate, rather acute, serrated,
 stam. longer than the corol. LIN. HUDS. E.
 BOT. SOLE. M. *arvensis* var. 2. With. M.
 verticillata. RAY syn. 232. 4.

Tall Red-m. Banks of riv. P. 8. 9. Sole 21. Ger. 680. 1.

Obs. The leaves on winged petioles, pubescent, pedunc. and
 calyx hairy. See E. Bot. 448.

paludosa. 24. M. Spike capitato-verticillate, leaves oblong, cre-
 nate, petioled, downy, nerves red, stem erect,
 somewhat branched, villous, reddish, stam. as
 long as the corol, odour very fragrant. SOLE.

Fen-mint. Fens. — 9. Sole 22.

Obs. The stem is terminated by a round head of flow. in no
 other species of verticillate Mints. SOLE.

semiterrens ovate Pule'gi-
leaf of Calceolae pinguum.
stem prostrate, much branched
downy creeping - pedicels hairy

25. M. Flow. verticillate, leaves ovate, obtuse, some-
 what crenate, stems rather cylindrical, creep-
 ing, stam. longer than the corol. LIN. HUDS.
 WITH. SOLE.

Penny-royal. Heaths. P. 8. 9. Sole 23. Woodv. 171.

706. TEU'CRUM. Cor. upper lip (none, tube on
 the upper side) 2-parted beyond the base,
 stamens between the diverging segments.

stem 4 sided Chamæ'-
decumbent drys.
leaves horizontal Calyx much
swollen at the base cord purple

1. T. Leaves cuneiformi-ovate, incised, crenate, pe-
 tioled, flow. 3 together, stems procumbent, ra-
 ther hairy. *Sage leaf* *hermaphrod*
 Com. Germander. Cornfields. P. 6. 7. Woodv. 243.

stem 4 sided Scorodo'-
leaves wrinkled nia.
flowers some yellow (Bry)

2. T. Leaves cordate, serrated, petioled, racemes
 lateral, one-rowed; stem erect. (Cor. white,
 filam. purplish.)
 Wood-sage. Woods, &c. P. 7. Curt. 295.


stem diffuse Scor'dium. 3. T. Leaves oblong, sessile, dentato-serrated, flow.
downy leaves toothed serrated
flowers in pairs or three together


3. T. Leaves oblong, sessile, dentato-serrated, flow.
 in pairs, axillary, peduncled, stem diffuse (pu-
 bescent). *Barbitt for Germander*
 Water Germander. Marshes. P. 7. 8. Woodv. 57.



Chama'pi- 4. T. Leaves trifid, linear, very entire, flow. sessile,
 thys. lateral, solitary, stem diffuse. See *Ajuga Cha-*
mæpithys.

505. A'JUGA. Cor. upper lip very small. Stam.
 longer than the upper lip. *not here at all*

Chavandula - *Trickes yield much essential oil by distillation*
oil contains a large proportion of camphire - flowers recieve
antiharmodii. cephalici

G. scabellata L. - Sp. 16 - in the ...  - The two opposite
ones when matured, forming a cross
dehiscence longitudinally according to
their position. Pollen elliptical with an
appearance of a longitudinal valve
and nearly round.

Lamium alb. - Anthers  thus in front-view and
in side view - The two cells being up &
Pollens the same appear. as in *Galeos.*
Ovule nearly the same

Ajuga reptans - Pollen distinct marked as follows 
Ovule of this flower  the micropyle appears
to be connected at the middle part of the seed
There is a large yellow gland by the side of the
capsules, opposite to the insertion of the pistil -

Ajuga Chamæpithys. Herb. Haller, acrimonicus, useful in scurvy
intermitting fevers, and jaundice.

DIDYNAMIA. GYMNOSPERMIA. *Ajuga*. 131

1. *A. Pyramidal* with 4 sides, villous, root-leaves *pyramida-*
very large. *Stolons 0. Corolla purple* *lis.*
— Ben Nevis, &c. B. — *F. Dan.* 185.
2. *A. Smooth* (or hirsute); with creeping stolons. *rep'tans. lims solitary*
Com. Bugle. Moist past. &c. P. 5—9. Curt. mid. a lot of cordia cut
of Capriensis *leaves simple*
3. *A. Leaves 3-cleft*, linear, very entire, flow. ses- *Chamaepi-*
sile, lateral, solitary; stem diffuse. *E. Bot. thys. Flowers shorter*
than the leaves, yellow
streaked with red
WITH. SCHR. *Teucr. Chamæpithys* Lin.
Huds.

Ground Pine Germander. Fallow fi. A. 4. 6. E. B. 77.

4. *A. Stem simple*, stem-leaves as large as the root- *alpina. Stolons 0*
leaves (almost smooth, irregularly toothed, *which rather distant.*
verticils not crowded, many-flowered. *E. Lower bracted cut*
upper not cut, coloured
With. *A. pyramidalis* Huds. *A. genevensis*

Alpine Bugle. Near Castleton. — 7. E. Bot. 477.

Obs. A. genevensis is thus described by Lin. "Leaves tomentous, streaked, calyxes hirsute." It is believed by Ger. and others to be a var. of *A. pyramidalis*, and of *A. rep'tans* by Haller. — The British plant is distinguished from *A. pyramidalis*, by the root-leaves not being larger than those of the stem, and by its leaves and verticils not assuming a pyramidal form; and Dr. Smith has no doubt of its being *A. alpina*, from comparing it with the description, and numerous specimens. See *E. Bot. P. 477.*

— *GALEOB'DOLON. Cor.* upper-lip entire, arched, lower lip without teeth, 3-cleft, segments broad, acuminate. *Anth.* fleshy on the back. *Huds. WITH.*

1. *GALEOB'DOLON.* See *Huds. Galeopsis Galeob'dolon. luteum.*
dolon. Lin. Pollichia Galeobdolon Gmel.
Yellow Archangel. Shady places. P. 5. Curt. 223.

718. *BETON'ICA. Cal.* awned. *Cor.* upper lip ascending, flattish, tube cylindrical. *3-cut*

1. *B. Spike interrupted*, middle segment of the *officinalis.*
(lower) lip emarginate. *leaves heart-shaped, crenate rather hairy*
Wood Betony. Woods, &c. P. 7. 8. Curt. 154. hairs of stem adpressed
Var. 2. *Spike entire*, or very nearly so. *calyx held. stem w.*

716. *LA'MIUM. Cor.* upper lip entire, arched, lower lip 2-lobed, throat with a tooth on each side.

1. *L. Leaves cordate*, acuminate, serrated, petio- *al'bum. flowers white*
led, verticils 20-flowered. *var. fl. h. coloured. calyx held with a brown*
White Archangel. Ditch-banks. P. 5. 6. Curt. 115. not on the black
2. *L. Leaves cordate*, obtuse, petioled. *white, 10 fl. purpureum. flowers purple*
Red Archangel. Rubbish, &c. A. 4—9. Curt. on the white corolla red

betonica off. 1200 2000 fl. leaves serrated - also smoked as tobacco formerly in high esteem as cephalic
laminum album, & purpureum are both used as a pectoral

- Flowers small. dissectum. 3. Leaves deeply and irregularly cut, stem-leaves extending down the petioles. WITH. L. purp. β. H. Kitchen gardens. A. 4—9. Pet. 33. 3.
- amplexi- 4. L. Floral leaves sessile, embracing the stem, obtuse. (Teeth of the corol indistinct. PERS.)
- caule. Pollichia amplexicaulis GMELIN.
- Heart-shaped upper leaves sepals Great Henbit. Sandy cornfi. A. 2—8. Curt. 109.
- Heart-shaped 5 lobed flowers cor. 717. GALEOP'SIS. Cor. upper lip somewhat crenate, arched, lower lip 2-toothed above.
- Color early flowers very, later flowers 4 times as large, the calyx pendulous
- Flowers 4 angled La'danum. 1. G. Stem-internodes equal, all the verticils remote, calyxes not thorny. (Teeth longer, linear-setaceous, diverging. WITH.)
- leaves linear lanceolate herbaceous Red Dead-Nettle. Cornfields. A. 9. Pet. 33. 11.
- flowers small, reddish grandiflo- 2. G. All the verticils remote, calyxes tubular, very hairy, teeth lanceolate, acuminate, short, straight.
- which girt with 2 leaves ra. WITH. G. villosa. Huds. with the following char. "Internodes of the stem equal, verticils remote, leaves lanceolate, serrated, villous."
- leaves ovate lan. Tet'rahit. 3. G. Stem-internodes thicker above, higher verticils somewhat contiguous, cal. rather pungent.
- colla yellow, lips with yellow Com. Dead-Nettle. Hedge-banks. A. 7. 8. E. Bot. 207.
- flowers - tube of cal. 3 times as long as calyx, yellow, palatale luteis syn. 240. 8. Var. 7. Huds.
3. Terminating flow. hypocrateriform, cor. 4-cleft, stam. 4 equal. See E. Bot. 207.
- cannabi'na. 4. G. Upper verticils contiguous, calyx tubular, teeth unequal, 3 larger, 2 shorter, linear. (Cal. purplish red, cor. about an inch long, yellow, middle segment of the lower lip purple.) WITH.
- internodes thickened above colla yellow, lips with yellow G. Tetrahit γ. Lin. δ. Huds. Ray syn. 241. 9.
- leaves broad ovate serrate Fair-flow. Nettle-hemp. Hedges. A. 7. 8. Pluk. 41. 4.
- colla yellow, mouth Galeob'do- 5. G. Verticils 6-flowered, invol. 4-leaved. See
- noted red, 2 lipped lon. Galeobdolon luteum. Page 131.
- the 3 cut lobes broad, middle lobe longest - Calyx white - leaves reticulated - stem 3-4
- leaves 3 lobed, lobes reflexed 719. STACHYS. Cor. upper lip arched, lower lip reflected at the sides, the intermediate segm. larger, emarginate. Stam. when deflorate, (diverging) turned towards the sides.
- stem solid sylvatica. 1. S. Verticils 6-flowered, leaves cordate, petioled.
- leaves 3-4 flowered Hedge Stachys. Hedges, &c. P. 7. 8. Curt. 183.
- leaves green - Corolla Var. 2. Leaves angular. WITH. Hedges. P. 7. 8.
- greenish blood color lips white spotted 3. β. Huds. Smaller. Leaf angular.
- leaves 3-4 flowered, lips white palus'iris. 2. S. Verticils about 6-flowered, leaves lineari-lanceolate, half embracing the stem, sessile.
- leaves becoming lacinios Clown's All-heal. Watery places. P. 8. Curt. 248.
- leaves rough - leaves silky above drven sis. 3. S. Verticils 6-flowered, leaves obtuse, nearly
- Stachys pedicularis - Herb. strigent, used to cure wounds by the fruit. Indication, by being bruised and applied to them - Also in ointment.
- The last medal of the society of arts was voted to Mr. Houten of Leipsig for introducing the roots as an excellent vegetable in 1828

naked, cor. as long as the calyx, stem feeble. *Stachys acuminata*
(Middle segm. of the lower lip not emar- *leaves 3 ribbed at*
ginate.) *the bottom teeth of the calyx. tinged corolla purplish*
Corn Stachys. Cornfields. A. 6—8. Curt. 246.

4. S. Verticils many-flowered, serratures of the *germanica*.
leaves imbricated, stem woolly. *corolla 2-lipped, lip 3-lobed, middle lobe*
Base Horehound. Hedges. P. 7. F. Dan. 684. *the very large reverse*
heart-shaped, purple & flowers on both sides. Stem & calyx woolly. leaves
710. NEP'ETA. Cor. middle segment of the un- *veined*
der lip crenate, throat with the margin
reflected. Stam. approximate.

1. N. Flow. spiked, verticils somewhat pedicelled, *Catalpa*.
leaves petioled, cordate, dentato-serrated. *Herb very soft sometimes*
Cat-mint. Hedges, &c. P. 7. E. Bot. 137. *woolly. leaves wrinkled*
corolla white, lips spotted with red. - Odour aromatic, sweet
720. BALLO'TA. Cal. hypocateriform (nearly), *liked by Cats*
5-toothed, 10-striated. Cor. upper lip
crenate, concave.

1. B. Leaves cordate, undivided, serrated, calyxes *ni'gra*.
acuminate. *stem branched, hairs recurved corolla purple*
Stinking Horehound. Rubbish. P. 7.8. E. Bot. 46. *this is bractiated*
Var. 2. β . Huds. Flow. white. Not B. alba *Decortication of the*
Lin. WITH. *Herb useful n. hypochondriacal & hysterical diseases*
721. MARRU'BIUM. Cal. hypocateriform, ri-
gid, 10-striated. Cor. upper lip bifid, li-
near, straight. *Flowers in whorls, whorls upon many*
flowered

1. Calyx 10-toothed.

1. M. Calyx-teeth (10) setaceous, hooked. *vulga're*.
White Horehound. Road sides. P. 7—9. E. B. 410. *stem woolly*
leaves round, petioled woolly beneath, which is very hairy
734. SCUTELLA'RIA. Cal. mouth entire, clos- *corolla white*
ed after flowering, covered with a lid.
1. S. Leaves cordato-lanceolate, crenate, flow. *galericula'*-
axillary. *solitary - stem 4 ang. bald, branched in to the middle*
Blue Skullcap. Banks of rivers. P. 8. Curt. 155. *2 bracts to each flower*
flowers on short pedicels - mouth 2-lobed, lower broadest, notched
2. S. Leaves cordato-ovate, almost entire (one- *mi nor*.
toothed on each side at the base), flow. axil-
lary. (Stem procumbent, or creeping, cor.
lower lip pinky white, spotted within.) *Herb red*
Less Skullcap. Heaths, &c. P. 7.8. Curt. 283.

727. THY'MUS. Cal. 2-lipped, the throat closed
with hairs. *corolla short, 2-lipped, lip 3-lobed, sides lobes*
notched middle lobe long

1. T. Fl. capitate, stems creeping, leaves flat, ob- *Serpyll'ium*.
tuse, ciliate at the base. *flowers capitate corolla purplish*
Mother of Thyme. Mount. places. P. 7.8. Curt: *aromatic, used*
as a cathartic in drops

134 DIDYNAMIA. GYMNOSPERMIA. *Thymus*.

134 DIDYNAMIA. GYMNOSPERMIA. *Thymus*.

— 3. γ . Huds. Flow. large. RAY syn. 230. 2.

— 4. β . Lin. δ . Huds. Leaves broad. DILL.

— 5. *ε. Lin. ε. Huds.* With the smell of lemon-peel. RAY syn. 231. 4. *Ger.* 571. 7.

— 7. n. Huds. Hirsute. RAY syn. 231. 6. *Vaill.*
32. 6.

— g. Scentless, hairy, small, creeping. DILL.
in R. syn. 231. 8. — Ireland. BONAVERT. See

With.

Obs. The stam. also vary in length, being in some longer than the corol, in others shorter, the former var. is named *exsertens*, the latter *inclusens* by Ehrhart.

T. Flow. verticillate, pedunc. 1-flowered, stems erect (ascending) rather branched, leaves acute, serrated.

Corn Basil. Dry hills. P. 6—8. *Curt.*

1. P. All the leaves ovato-oblong, serrated, petioled.
Common Self-heal Pastures. &c. P. 8. Curt. 220.

26. ORIG'ANUM. Strobile 4-sided, spiked, col.

lecting the calyxes. (*Flow.* forming a four-sided spike-like *cone*. WITH.)

1. O. Spikes roundish paniced, conglomerate, bracts ovate, longer than the calyx.

O. Spikes oblong, aggregate, hirsute, leaves cor.

Pot. Marjoram. Dry meadows. P. 8. Ger. 664. 2.

Obs. *O. Onites* is inserted here on the authority of Dill. *Beals* our 266 and Huds. It seems however very

Ray's syn. 236. 2., and Huds.—It seems however very doubtful, whether the British plant be more than a var. of *vulgare*, in which light it is viewed by With.—Lin. gives

reference to Huds., but the reference to Bauh. pin. has a note of interrogation annexed to it. The habitat assigned by Lin. is *Saxones*, and he adds the following distinctive

by Lin. is *Syracuse*, and he adds the following distinctive marks, "The habit of *Majorana*, but woody. Stems with long patulous hairs. Leaves small, cordate, nearly sessile

acute, rarely serrated, tomentous on both sides, from the axillæ the rudiments of branches. * Spikes heaped together

Plant was on aromatic dried leaves
 and stems and a strong sweet

Spential soil very acid, used as a fertilizer
Topsoil deep purple.

DIDYNAMIA. GYMNOSPERMIA. Origanum. 135

as in Maj., but oblong, villous, 3 together on each pedunc., the intermediate one sessile. Flow. white." Sp. pl.

725. CLINOPO'DIUM. Involucre many-bristled, lateral lobes of corolla under the verticil. - *cruciate* - middle lobe notched - *foliis oppositis* - *herb*

1. C. Heads roundish, hispid, bractes setaceous. *vulga're*.
Wild Basil. Meadows, &c. P. 7. F. Dan. 930. *leaves petiolated and hairy*
slightly bristled - bractea villosa - involucrem raris bristled

731. MELIT'TIS. Cal. larger than the tube of the corol. Cor. upper lip flat, lower lip *def* crenate. Anthers forming a cross.

1. MELITTIS. *Melisso-*
Bastard Balm. Hedges, &c. P. 6. Curt. *phyl'lum.*

728. MELIS'SA. Cal. dry, flattish above, upper lip nearly fastigate (expanding and reflected. WITH.) Cor. upper lip somewhat arched, bifid, lower lip with the middle lobe cordate. *flowers in whorls axil.*
white, peduncled
peduncles forked

1. M. Peduncles axillary, dichotomous, as long as the leaves. (Stem erect.) *Calamin'- lower lobes*
Mount. Calamint. Road sides, P. 6-8. Ger. 687.3. tha. of calyx villous
crolla light violet
2. M. Pedunc. axillary, dichotomous, longer than the leaves, stem ascending, hirsute. *leaves more by and shorter, some*
Field Calamint. Road sides, &c. P. 8. Curt. *ed 2 upper teeth of calyx*
upright, hairs at the mouth prominent, white

ANGIOSPERMIA.

779. OROBAN'CHE. Cal. bifid. Cor. ringent. Caps. 1-celled, 2-valved, many-seeded. A Gland under the base of the germ.

1. Corols 4-cleft.

1. O. Stem very simple, cor. 4-cleft, inflated, *stam. major*. naked below, stigma 2-lobed, lobes distant, styles pubescent above. SUTTON. (Cor. upper lip undivided, lower equally trifid. E. Bot.) CURT. WITH.—Not of Lin.?
Broom-rape. Uncultivated pl. P. 5. 6. Curt. 232.
2. O. Stem very simple, cor. 4-cleft, *stam. elatior*. hairy below, stigma obcordate, style smooth above. SUTTON.
— In clover-fields. P. 7. 8. Lin. Tr. iv. pl. 17.
3. O. Stem very simple, cor. 4-cleft, *stam. minor*. hairy below, stigma retuse, style smooth above. SUTT. (Stem simple, cor. tubular, upper lip undivided, lower in 3 curled segm., the mid-

136 DIDYNAMIA. ANGIOSPERMIA. Orobanche.

dle one lobed, stam. ciliate, style smooth. E. Bot.) *O. ramosa*. β . Huds. *Less Broom-rape*. In clover-fi. P. or B. 7. 3. E. B. 422.

2. Corols 5-cleft.

cæru'lea. 4. *O.* Stem mostly simple, cor. 5-cleft, bractes 3 together, cal. tubular, half 4-cleft. SUTT. (Stem simple, cor. tubular, upper lip cloven, and emarginate, lower in 3 equal entire segm., stam. smooth, bractes 3. E. Bot.) *O. ramosa*. var. 2. WITH.

Purple Broom-rape. In pastures. P. 7. E. Bot. 423.

ramo'sa. 5. *O.* Stem branched, cor. 5-cleft, bractes 3 together, cal. short, 4-parted. SUTT. (Bractes 3, 1 large external, 2 small internal. E. Bot. 423.) LIN. HUDS. WITH.

Branched Broom-r. In hemp-fields. A. 8. 9. E. B. 184.

Obs. The above arrangement, and descriptions of the British species of Orobanche are taken from a very interesting paper in the Lin. Tr. vol. iv. by the Rev. C. Sutton; to which I must beg leave to refer my readers.

Grotta tubular 2 lfp 743. LATHRÆA. Cal. 4 (or 5) -cleft. A depressed Gland at the base of the suture of the germ. Caps. 1-celled. *Root scaly*

Antheus hirsute
Stigma naked
Root white Squamal- 1. L. Stem undivided, corols pendulous, lower lip 3-cleft.

Leaves heart-shaped *rig.* Great Toothwort. Shady places. P. 4. 5. E. Bot. 50.

Stem 9 inches *Cal. white* *limb of Corol purple* *tube white* 739. BARTISIA. Cal. 2-lobed, emarginate, coloured. Cor. (sometimes) less coloured than the calyx, upper lip longer. Caps. 2-celled.

visco'sa. 1. B. Upper leaves alternate, serrated, flow. distant, lateral.

Viscous Bartsia. Marshes, &c. A. 7. 8. Lightf. 14.

alpi'na. 2. B. Leaves opposite, cordate, obtusely serrated. (Cal. 4-cleft, cor. upper lip emarginate, lower 3 lobed, anth. very hairy. OESTERR.)

Alpine Bartsia. Banks of rivers. P. 9. E. Bot. 361.

Odonti'tes. 3. B. Upper leaves alternate, lanceolate, serrated, flow. racemous, 1-rowed. HUDS. *Euphrasia odontites*. Lin. See Euphrasia.

741. EUPHRA'SIA. Cal. 4-cleft, cylindrical. Caps. 2-celled, ovato-oblong. Anth. lower lobe of the lower ones thorny at the base (ending in a thorny point).

officina'lis. 1. E. Leaves ovate, streaked, finely toothed.

Stem 8 inches *fruit* Com. Eye-bright. Dry pastures. A. 6—9. Curt. 335.

Branches racemous *flowers alternate* *white with purplish*
lines *calat. yellow* *Herb weakly strigose* *repeated*
epithalonia

DIDYNAMIA. ANGIOSPERMIA. Euphrasia. 137

2. E. Leaves linear, all serrated.

Odontites.

Red Eyebright. Pastures, &c. A. 7—9. Curt.

Obs. It neither agrees in generic character with *Bartsia*, nor *Euphrasia*. Afzelius would therefore form a new genus for this plant, and *B. alpina*, with which he thinks it does agree. See With.

740. RHINAN'THUS. Cal. 4-cleft, ventricose.

Caps. 2-celled, obtuse, compressed.

1. R. Upper lip of the cor. compressed, shorter. *Crista-*

Yellow Rattle. Meadows. A. 6. 7. Curt. 320.

gal'li.

Var. 2. β . Lin. Huds. 2. With. Larger, narrow-leaved, flower smaller, yellow, lip purple.

DILL. in Ray syn. 284. 2.

Obs. Ehrhart has divided this species into two;

1. R. *major*. Stem spotted, pistil projecting, coloured.

Curt.

2. R. *minor*. Calyxes smooth, pistil included. See Persoon.

742. MELAMPY'RUM. Cal. 4-cleft. Cor. upper

lip compressed, margin folded back.

Caps. 2-celled, oblique, opening on one side. Seeds 2, gibbous.

1. M. Spikes quadrangular; bractes cordate, compact, denticulate, imbricated. *crista'tum.*

Crested Cow-wheat. Woods. A. 6. 7. E. Bot. 41.

2. M. Spikes conical, loose, bractes with setaceous teeth, coloured. *arven'se.*

Purple Cow-wheat. Cornfields. A. 7. E. Bot. 53.

3. M. Flowers lateral, one-rowed, leaves in distant pairs (toothed at the base), corols closed. *pratens'e.*

Meadow Cow-wheat. Woods. A. 7. 8. E. Bot. 113.

4. M. Flowers (smaller) one-rowed, lateral, leaves in distant pairs (all of them entire), corols gaping. *sylvat'icum.*

Yellow Cow-w. Alpine woods. A. 6—8. F.D. 145.

776. LIMOSEL'LA. Cal. 5-cleft. Cor. 5-cleft, equal. Stam. in approximate pairs. Caps. 1-celled, 2-valved, many-seeded.

1. L. Leaves lanceolate (spatulate).

aquat'ica.

Pastard Plantain. Watery pl. A. 7—9. E. B. 357.

756. SCROPHULA'RIA. Cal. 5-cleft. Cor. somewhat globular, resupinate. Caps. 2-celled.

1. S. Leaves cordate, doubly serrated, raceme compound, interspersed with leaves. *Scorodo'-*

nia. angulm leavis

Balm-leaved Figwort. Watery pl. P. 7. 8. Pet. 35. 11. mostly opposite.

Peduncles 2 or many flower. Dotted two at the divisions. Flowers spotted. Calyx hairy. Flowers paler than S. aquat-

Scrophularia nodosa - Its rank smell and bitter taste indicate it to have some active qualities - a decoction of the leaves is used as a wash for the seat in sun.

138 DIDYNAMIA. ANGIOSPERMIA. Scrophularia.

- Root granulated nodo'sa.* 2. S. Leaves cordate (or ovate), 3-nerved, stem with (somewhat) obtuse angles. Great Figwort. Moist hedges. P. 7. Ger. 716. 1.
- Stem 2 feet upright*
- Flowers blackish blood colour* aquat'ica. 3. S. Leaves cordate, obtuse, petioled, decurrent, angles of the stem membranous, racemes terminating. Water Figwort. Watery places. P. 7. 8. Curt. 291.
- Root fibrous Stem 4 feet*
- membranaceously winged*
- Flowers blackish blood col.* verna'lis. 4. S. Leaves cordate, stem-leaves 3 together, peduncles axillary, solitary, bifid. Yellow Figw. Watery places. B. 4. 5. F. Dan. 411.
- Leaves acutely keeled*
- separated downy*
- Stem 4 angular hairy* *Flowers crowded yellow*
775. SIBTHORPIA. Cal. 5-parted. Cor. 5-parted, equal. Stam. in distant pairs. Caps. compressed, orbicular, 2-celled, dissepiment transverse.
- europæ'a. 1. S. Leaves reniform, somewhat peltate, crenate. Bastard Moneywort. Marshy pl. P. 7—9. Pet. 6. 11.
- corolla bell-shaped*
- oblong leaves alternate*
- flowers spiked purple white*
- with blood col.* purpu'era. 1. D. Calyx-leaflets ovate, acute, corols obtuse, upper lip entire. Com. Foxglove. Hedge-banks. B. 6. 7. Curtis.
- Stem mostly upright*
- Flowers spiked*
- corolla perianth 4-lobed*
- 3 lobes mouth closed, palate*
750. ANTIRRHINUM. Cal. 5-leaved. Cor. base projecting downwards, nectariferous, Caps. 2-celled. *Stems 4* *Sty 1*
1. Leaves angular.
- Cymbala'-ria. 1. A. Leaves cordate; 5-lobed, alternate, stems procumbent. (Seeds wrinkled.) Ivy-leaved Snapdragon. Old walls. P. 6—10. Curt. Var. 2. Fl. regular, 5-cleft, spurs 5, as in Peloria. MURRAY.
- Elat'ine. 2. A. Leaves hastate, alternate, stems procumbent. Sharp-pointed Toad-flax. Cornfi. A. 8—10. Curt. Var. 2. Fl. regular, 5-cleft, spurs 3, 4, or 5, as in Peloria. Huds.
- spu'rium. 3. A. Leaves ovate, alternate, stems procumbent. (Flow. incurved.) Round-leaved Fluellin. Cornfi. A. 7—9. Curt. 205. Var. 2. Fl. regular, &c, as in the preceding sp. Huds.
2. Leaves opposite.
- monspessu-la'num. 4. A. Leaves linear, crowded, stem shining, panicled, peduncles shining, spiked. A. repens. a. Huds.

Digitalis - The leaves are now considered as one of the most valuable diuretics in Dropsy, either in powder, infusion or tincture and as a sedative in fevers & consumption. - I have a great stock & diminishing alter. action, but this action is sometimes excited

Suddenly, by the accumulated effects of small doses of
 fatal symptoms appear sometimes even after the fructi-
 tion has relinquished his medicine

DIDYNAMIA. ANGIOSPERMIA. Antirrhinum. 139

Sweet-smelling S. Hedges. P. 7—9. J. Bauh. iii. 459. 1.

5. A. Many of the leaves alternate (only the three lowest pairs opposite), lanceolate, obtuse, stem very much branched, diffuse. *mi' nus. Stem very much branched, diffuse.*
 Least Toadflax. Sandy cornfi. A. 6—9. Curt. 296. *calyx longer than the spur. corolla violet, lip white & more creasing snap dragon*
 Obs. It is placed in the next division by Lin. *Palate yellow - leaves vivid*
6. A. Leaves linear, crowded, below 4 together, repens. *Stem branched cal. as long as the capsule. A. repens. B. stem upright - root creep.*
 Huds. *Flowers streaked, greenish white, upper lip streaked with*
 Creeping Sn. Fields. P. 7. 9. Dill. 163. 197. *simple, much branched*
7. A. Leaves somewhat linear, lower 4 together, arven'se. *Flowers numerous, small*
 calyxes with viscid hairs, fl. spiked, stem erect. *blue, spur & bractes cream*
 Corn Toadflax. Sandy cornfi. A. 7. 8. Dill. 163. 198. *red leaves bold*

3. Leaves alternate (minus).

8. A. Leaves lanceolato-linear, crowded, stem erect, spikes terminating, sessile, flow. imbricated. (Calyx smooth.) *Lina'ria. Root creeping*
 Toadflax. Road sides. P. 7. 9. Curt. *Stem scarcely branched. leaves spread; spike many flowered, close; flowers gold yellow, palate yellow*
 Var. 2. Nect. 2, or more to each flower. Var. *and fulvous*
 3. With. *juice mixed with milk*
 — 3. Peloria. B. Huds. var. 4. With. Cor. *a person to pierce. leaves*
 regular, with 5 equal stamens, and 5 nect. E. *in impression dim. white &*
 Bot. 260. *fragrant - useful in*
 Obs. According to Lin. the fruit of this var. is always abortive; but Hoffman has met with fertile seeds, which produced plants of the common form of A. linaria. Bot. Annal. *ointment for piles*

4. Corols gaping, or without a spur.

9. A. Fl. spiked, calyxes rounded. *leaves lanc. spikes majus. - flowers close rose*
 Greater Snapdr. Old walls. B. 6. 7. E. Bot. 129. *color, palate yellow*
10. A. Fl. nearly spiked, calyxes longer than the corol. *Oron'tium. leaves lanceolate*
 Less Snapdrag. Sandy cornfi. A. 7. 8. Curt. 234. *stem hairy - leaves bold - corolla flesh color, lip rose*
 746. PEDICULA'RIS. Cal. (mostly) 5-cleft. *color, palate yellow*
 Caps. 2-celled, mucronate, oblique. Seeds (not) coated (few, angular, acute). *capsule dotted Primus*
1. P. Stem branched (solitary), calyxes crested with callous dots, lip of the corols oblique. *palus'tris. leaves opposite*
 (Cal. ovate, hairy, ribbed, with 2 notched divisions. E. Bot.) *mostly pinnatifid*
 Marsh Lousewort. Huds. P. 6—8. E. Bot. 399. *stem much branched*
18 inches angular
flowers large purple

Antirrhinum
July 31

Pedicularis sylvatica - Juice or decoction a good ingre.
for various ulcers - Linnæus says it renders sick
habby, warm with venous, & makes their wool loose

140 DIDYNAMIA. ANGIOSPERMIA. Pedicularis.

Loef-fenform sylvatica. 2. P. Stem branched, calyxes oblong, angular,
Stem 9 inches, erect smooth, lip of the corols cordate. (Stems sev-
leaves radical. Flowers eral, spreading, simple; cal. oblong, angular,
large rose colour lip of the smooth, with five unequal notched segments.
Corolla unequally bent E. Bot.) Com. Lousewort. Moist ^{Heaths} P. 6. 7. E. Bot. 400.

774. LINNÆA. Cal. double, of the fruit 2-leav-
ed, of the flow. 5-parted, superior. Cor.
campanulate. Berry dry, 3-celled.

Low woody borealis. 1. LINNÆA. (Cal. of the fruit 4-leaved, 2 leaflets
creeping, frushate, long smaller, more acute, reddish. SCHKÜHR.)
leaves opposite even Two-flow. Lin. Rocky mossy woods P. 6. E. B. 433.
petioled flowers drooping, corolla red or white, variegated.
Flower smells at night like meadow sweet.

July 3)

1. A. Linnæa borealis - Linnæus, sylvatica, stem c. 11

pedicels spreading, low, imbr.

calyx (5-lobed) (black smooth) (black smooth) (black smooth)

lobes 5, rounded, T. 9. Cor. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

Var. 2. Linnæa, or more to each flower. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

Cor. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363.

CLASS XV.

TETRADYNAMIA.

SILICULOSA.

1. *Silicle entire, not emarginate at the end.*

— MOEN'CHIA. *Silicle* ovate, crowned with the style, valves rather convex. WITH. GMELIN.

800. DRA'BA. *Silic.* valves flattish. *Style* 0.

799. SUBULA'RIA. *Silic.* valves semi-ovate. *Style* shorter than the silicle.

796. MYA'GRUM. *Silicle* valves concave. *Style* persisting.

797. VEL'LA. *Silic.* valves one half shorter than the dissepiment.

823. BU'NIAS. *Silicle* deciduous, roundish, mucronated.

825. CRAM'BE. *Silic.* deciduous, globular, like a dry berry. *Filam.* 4 (longer) forked at the end.

824. I'SATIS. *Silic.* deciduous, lanceolate, 1-seeded.

(*Cochlearia Coronopus.*)

2. *Silicle emarginate at the end.*

804. IBE'RIS. *Petals* 2 outermost larger.

803. COCHLEA'RIA. *Silicle* cordate, valves obtuse, gibbous.

801. LEPID'IUM. *Silic.* cordate, valves acutely keeled.

802. THLAS'PI. *Silic.* obcordate, valves (in some species) marginate, keeled.

SILICUOSA.

1. *Calyx* closed, the leaflets converging longitudinally.

TETRADYNAMIA.

822. RAPH'ANUS. *Silique jointed.*
 814. ERY'S'IMUM. *Silique 4-cornered.*
 815. CHEIRAN'THUS. *Silique, the germen with a gland on each side of its base.*
 817. HES'PERIS. *Glands within the shorter stamens. Pet. oblique.*
 818. AR'ABIS. *Glands 4 within the leaflets of the calyx. Stigma simple.*
 820. BRAS'SICA. *Glands 2 within the shorter stamens; 2 on the outside of the longer stamens.*
 819. TURRI'TIS. *Petals erect.*
 811. DENTA'RIA. *Silique valves revolute, when open.*

2. *Calyx gaping, the leaflets distant above.*

812. CARDAM'INE. *Silique opening, valves revolute.*
 821. SINA'PIS. *Silique opening. Calyx expanding horizontally.*
 813. SISYM'BRIUM. *Silique opening, valves straightish.*

Obs. *Crambe, Isatis, and Bunias* are placed in this division by

LINNEUS.

(*Brassica Napus.*)

SILICULOSA.

- MOEN'CHIA. *Silicle entire, ovate, crowned with the style. Valves rather convex, parallel to the partition, cells many-seeded.*
 GMELIN. WITH.

Stems erect downy

leaves sativa.

concolorate arrow shape

petals yellow not thick

cultivated for the

seed oil

sativum.

der'na.

oblique, longed, hirta

radical, hairy

Eaten as a salad, also used in whillows or Telous

1. M. Silicles obovate, peduncled, many-seeded.

WITH. Myagrum sativum. Lin.

Gold of Pleasure. Cornfields. A. 5. 6. F. Dan. 1038.

795. MYA'GRUM. Silicle terminated by a conical

style; cell mostly 1-seeded.

1. M. Silicles obovate, peduncled, many-seeded. See

Moenchia sativa.

800. DRA'BA. Silicle entire, ovali-oblong, valves

flattish, parallel to the dissepiment. Style o.

1. M. Silicles obovate, peduncled, many-seeded. WITH. Myagrum sativum. Lin.

Gold of Pleasure. Cornfields. A. 5. 6. F. Dan. 1038.

795. MYA'GRUM. Silicle terminated by a conical

style; cell mostly 1-seeded.

1. M. Silicles obovate, peduncled, many-seeded. See

Moenchia sativa.

800. DRA'BA. Silicle entire, ovali-oblong, valves

flattish, parallel to the dissepiment. Style o.

1. D. Scapes naked, leaves slightly serrated. (Petals


bifid.) Petals whole

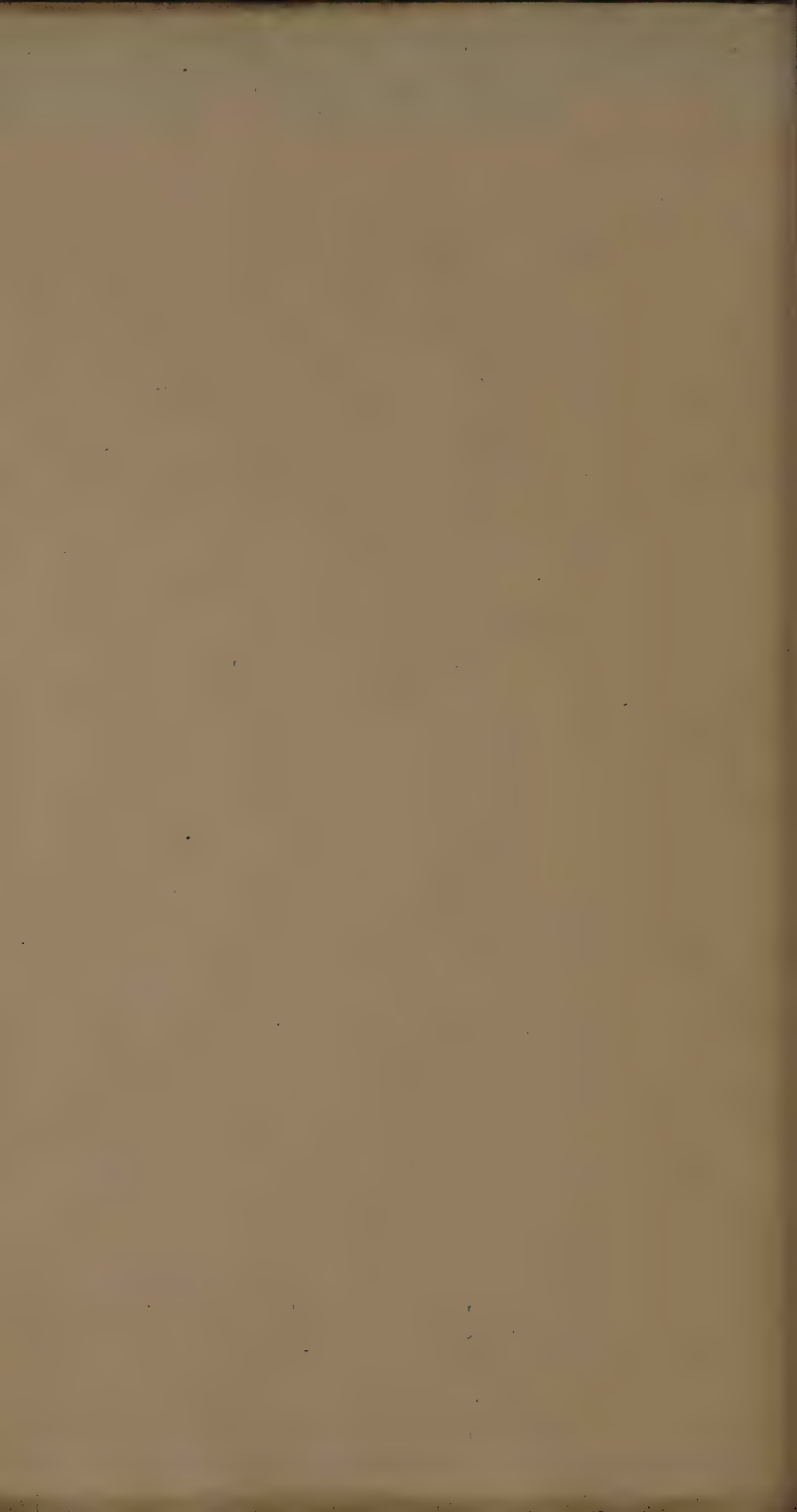
Whillow-grass. Walls, &c. A. 3. 4. Curtis.

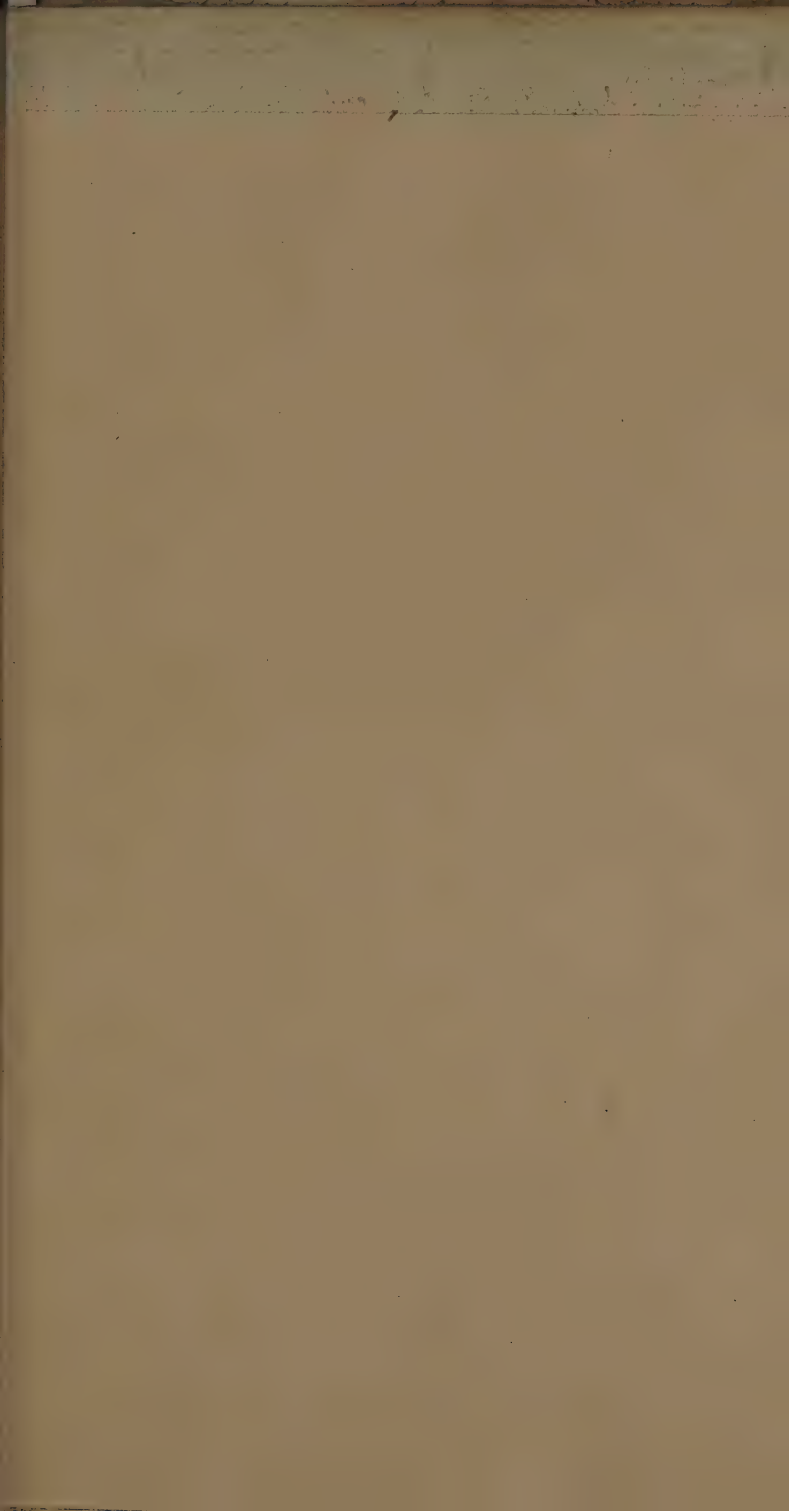
3

Glecoma hederacea. Apr 6th to the 8th thus forming
when meeting a crop dehiscing longiter
according to the point of the anther

Pollen elliptical and curiously marked with
several grooves like the lines on a globe when
immersed in water they become round and the
lines disappear - The ovary at this time project-
like four small nipples from a large fleshy disk
the ovules I could not find -

April 20th The more advanced capsules are
elliptical & completely separated from each other
the seed of this form 





2. D. Leaves (obovate) hairy, toothed or entire, *stellata*.
scape 1-leaved, silicles oblong, erect. JACQ.
Petals entire. WITH. D. *hirta* Lin. ? *Calys hairy petals white*
— Ben Lawers. DICKS. P. 5. 6. Jacq. Aus. 432.
- Obs. Lin. has given the annexed char. of D. *hirta*, "Scape (stem) 1-leaved, leaves somewhat hirsute, silicles oblique, pedicelled;" and observes that the petals are white, emarginate, the silicles more smooth than those of D. *incana*, and ovate, the peduncles half as long as the silicle. SP. PL.
3. D. Stem branched, leaves ovate, sessile, tooth- *muralis*. *Stem hairy*
ed. (Pedunc. when in fruit, horizontal, longer than the somewhat oblique silicles.) *flavus long above*
Wall Whitlow-grass. Rocks, &c. A. 5. Pet. 48. 5. *changing to long raceme*
799. SUBUL'RIA. Silicle entire, ovate, valves
ovate, concave, contrary to the dissepiment. Style shorter than the silicle. *Petals white*
1. SUBULARIA. *Plant increased, leaves bald* *aquat'ica*. *leaves radical*
Water Awl-wort. Lakes. A. 6. 7. F. Dan. 35. *fls. pedicelled*
797. VEL'LA. Silicle with a dissepiment twice
as large as the valves, ovate without. *Petals white*
1. V. Leaves *pinnatifid*, silicles pendulous. *stem branched, bifid*
Cresse-rocket. Salisbury Plain. A. 6. Ger. 247. 4. *an'nua, bristled, curved*
823. BU'NIAS. Silicle (Drupe-like) deciduous,
4-sided, the angles unequal, acuminate,
(sharp, often) muricated. *back - Petals yellow veined wth violet*
1. B. Silicles ovate, smooth, 2-edged (somewhat *Cak'ile*. *leaves pinnatifid*
4-cornered). *slightly toothed, fleshy - Herb smooth rather glaucous*
Sea-rocket. Sea-shore. A. 6—10. E. Bot. 231. *Petals light purple*
825. CRAM'BE. Four longer Filam. 2-forked at
the end, one of the points anther-bearing.
Berry dry, globular, deciduous. *leaves smooth, waved, pet. white*
1. C. Leaves and stem smooth. *marit'ima, petals white*
Sea Colewort. Sea shore. P. 5. 6. F. Dan. 316. *silicle globose*
824. I'SATIS. Silique (Pericarp) lanceolate, 1-
celled, 1-seeded (crowned by the style),
deciduous, 2-valved, valves navicular. *Herb with a strong - the Saturday's leaf -*
1. I. Root-leaves crenate, stem-leaves sagittate, si- *tincto'ria*.
licles oblong, *reniformis* *Stem with leaves glaucous*
Wild Wood. Cornfields. B. 6. 7. E. Bot. 97. *The herb is manufactured*

into a blue pigment, by being ground, made into balls, dried upon hurdles, then ground again, watered, left to heat until perfectly dry and mouldy - In Hungary it has been manufactured, & is taken equal to Indigo, but then it was expensive - One female ancestor haunted their bodies with it before the Reformation -

Cochlearia anglica - Herb scd. but water is a salty liquor. Silicles anticribute; the juice distilled water, and a conserve of the leaves, are employed in the sea-scurvy, the asthma and rheumatism - Not altered by cultivation.

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TETRADYNAMIA. SILICULOSA. Iberis.

804. *IBE'RIS*. Cor. irregular; 2-outer petals larger. Silicle many-seeded, emarginate.

ama'ra.

Petals white

1. I. Herbaceous, leaves lanceolate, acute, slightly toothed, flow. racemous.

Bitter Candytuft. Cornfields. A. 6. 7. E. Bot. 50. 2.

Herb bald nudicaulis. 2. I. Herbaceous, leaves sinuated, stem naked, simple (sometimes with 2 or 3 leaves).
Stems depressed
branched - leaves lanceolate
white, petals white

Naked Candyt. Heaths. A. 5-7. Curt. E. Bot. 327.

Var. 2. Stem leafy, leaves 2, or 3, oblong, entire. HUDS.

803. *COCHLEA'RIA*. Silicle emarginate, turgid, rough, valves gibbous, obtuse. *Stolon*

Herb bald officinalis. 1. C. Root-leaves cordato-circular, stem-leaves oblong, somewhat sinuated. (Stem branched.)
Fleshy - stem angular
branches corymbosa
Roots branched
Stem-leaves embracing

Scurvy-grass. Sea shore. A. 4. 5. F. Dan. 135.

Obs. It is subject to considerable changes in its appearance.

See With. Vol. iii. p. 572.

dan'ica.

2. C. Leaves hastato-angular, all of them deltoid. (Stem not branched. Stolons procumbent. —

Leaves deltoid
Stems reticulated and
with a short style

Stems diffuse procumbent, silicles ovate, mostly 3-seeded. ROTH in Bot. Ann. St. 4. 40.)

Danish Scurvy-grass. Sea shores. A. 5. 6. F. D. 100.

granlan'-
dica.

3. C. Leaves reniform, entire, fleshy.

— Mount. A. Huds. B. Mil. 4. 5. Barth. act. iii. t. 144.

Are C. granlandica, anglica, & danica, var. of C. officinalis?

Leaves fleshy anglica. 4. C. All the leaves ovato-lanceolate. (Stems erect, approximate, silicles roundish, 4-seeded. ROTH.

1. c.) Silicles wrinkled, sinuated, long style

Sea Scurvy-g. Sea shores. A. or B. 5. F. Dan. 329.

Stem hairy Coronopus. 5. C. Leaves pinnatifid, stem depressed. (Silicles

reniform, cristato-muricated.)

Swine's-cress. Cornfields, &c. A. 6. 8. Mart. 92.

Petals white Armora'-
cia.
Silicles
Elliptic, short style
usually barren
increasing only by
the root Page 145

6. C. Root-leaves lanceolate, crenate, stem-leaves incised.

Horse-raddish. Sides of Ditches. P. 5. Woodv. 150.

Var. 2. Root-leaves deeply pinnatifid. St. Pet. 49. 12.

801. *LEPID'IUM*. Silicle emarginate, cordate, many-seeded, valves keeled, contrary.

1. Four stamens longer.

petraeum.

1. L. Leaves pinnate, very entire, petals emarginate, less than the calyx. (Leaflets elliptical, very entire, thickish. JACO.

Silicles blunt each way
Elliptic
short style

Mount. Pepperwort. Rocks. B. 3. 4. E. Bot. 111.

Lepidium salinum - Garden cress or cultivated pepperwort -
leaves many cut, oblong, curled, clypted, 3 parted
Herb white young eaten as a warm salad - Seeds
diaphanous, perianth absorption

Thlaspe arvense - Seeds acid - *Sal.* Herb has a garlicky
 flavum communicater abad taste to the milk of cow

TETRADYNAMIA. SILICULOSA. *Lepidium*. 145

2. L. Leaves ovato-lanceolate, entire, serrated (in *latifolium*. 'Leaves? just the middle.—Flow. racemous, minute, silicles *acumens glaucous pointed elliptical. PERS.*) *Petals white, not cut* - *Plant acid etc.*
Broad-leaved Dittander. Past. P. 6. 7. E. B. 182. *coarctata; in infusion smelter*
 3. L. Leaves pinnatifid, stem erect, fruit didy- *didy'mum. Silicle not*
 mous (muricated—Nearly allied to Coch. co- *trunc, reticulated, un-*
ronopus.) L. *anglicum* Huds. with this char. *shled - Stem hairy*
 "Flow. diandrous (or tetrandrous), 4-petall- *(Gray)*
 ed (or apetalous), leaves pinnatifid, stem pro-
 cumbent, hairy."
Procumbent Dittander. Rubbish. A. 6. 7. E. B. 248.
 4. L. Flow. diandrous (and tetrandrous), apetal- *rudera'le. Stem 1 point*
 ous (sometimes), root-leaves dentato-pinnate; *branched, flexuous*
 branch-leaves linear, very entire. *woolly - leaves fleshy*
Narrow-leaved Ditt. Rubbish. P. 6. 7. F. D. 184. *bald - flow? small*
- 302. THLASPI. Silicle** (generally) emarginate,
 obcordate, many-seeded; valves navicu-
 lar, keeled at the margin. - *Seeds concentrically striated*
1. T. Silicles orbicular, leaves oblong, toothed, arven'se. - *Herb hairy*
 smooth. *in shape*
Treacle Mustard. Cornfl. A. 6. 7. F. Dan. 793. *stem erect. Petals white*
Silicles very large
 2. T. Silicles roundish, leaves sagittate, toothed, *campest're.*
 hoary. - *Stem 1 post pinnately branched - Petals small*
Mithridate-Mustard. Cornfields. B. 6. 7. Curtis.
 Var. 2. Leaves smooth, scarcely serrated, root-
 leaves not sinuated. WITH. *Ger. 262. 2.*
 — 3. Silicles, stem, and leaves tomentous.
 Root-leaves entire, linear-lanceolate, on long
 petioles. WITH. *Th. hirtum. Huds. B. 7.*
 3. T. Silicles obcordate; stem-leaves cordate, *perfolia' - Stem branched*
 smooth, somewhat toothed, petals as long as *tum. on previous leaf simple*
 the calyx, stem branched. (Root-leaves pet- *Petals small white*
 tioled, stem-leaves embracing, toothed, pet.
 rather longer than the calyx.) T. *alpestre* Hud.
Perfoliate Sh. P. Burford Downs. A. 4. J. Aus. 337.
 4. T. Silicles obcordate (each cell 1, or 2-seeded), *monta'num.*
 leaves smooth, root-leaves fleshy, obovate,
 very entire, stem-leaves embracing (erect, ob-
 longo-lanceolate), corols larger than (twice as
 large as) the calyx.
Mount. Bastard-cress. Past. P. 6. 7. Jacq. Aus. 237.
 5. T. Silicles obcordate, leaves somewhat toothed *alpest're.*
 (glaucous), stem-leaves embracing (root-leaves

Cochlearia arvensis - *U. Horse radish* - Root scraped up
 & a sauce - Eaten by itself it induces difficulty of breathing
 the infusion in milk is employed as a cathartic, also as
 a pectoral and diaphoretic, as a stimulant and detergent
 The distilled water is acid and stimulant

Erysimum officinale used as a potherb, is warm and acrid. Juice of great use in haemorrhoids, and ulcers of the throat made into a syrup, and slowly swallowed.

146 TETRADYNAMIA. SILICULOSA. Thlaspi.

petioled), pet. (very small) as long as the calyx, stem (mostly) simple.

— Limestone rocks B. 7. E. Bot. 81.

mis in vine Bur'sa 6. T. Silicles (triangulari-) obcordate, root-leaves
seed. to soil. pasto'ris. pinnatifid. *Stem leaves silky fl. white*
Shepherd's Purse. Road sides. A. 3—9. Curtis.



Bony cell of the silique of Raphanus raphanistrum

SILICUOSA.

322. RAPH'ANUS. Cal. closed. Silique cylindrical, torose, somewhat jointed. Glands 2 melliferous between the shorter stamens and pistils, and 2 between the longer stam. and calyx.

stem branched. Raphanis'-1. R. Siliques cylindrical, jointed, smooth, 1-celled.
at top, hooked; trum. (Corol striped with purplish veins, stems even,
hairs standing out glaucous, generally branched from the bottom.)
leaves rather rough White-flowered Charlock. Cornfi. A. 6. 7. Curt. 267.

814. ERY'SIMUM. Silique columnar, exactly 4-sided. Cal. closed. (Stigma a knob. WITH.)

Herb hairy - Her officina' le. 1. E. Siliques pressed to the spike, leaves runcinate.
2 feet - Pet. lanceolate Hedge Mustard. Road sides. A. 5. 6. Curt. 326.
2 feet Barba'rea. 2. E. Leaves lyrate, terminating segment almost
upright angular - leaves shining round. (Upper leaves obovate, toothed, siliques
dark green - Herb mucilag. is not exactly 4-cornered.) *Flowers yellow*
transversely biter Yellow Rocket. Waste ground. P. 5—10. E. Bot. 443.

leaves hairy Allia'ria. 3. E. Leaves cordate, *petioled, deeply toothed*
leaves hairy Sauce-alone. Hedges, &c. P. 5. Curt. 144.

leaves 3-parted Cheiran'- 4. E. Leaves lanceolate, very entire (toothed), sili-
leaves 3-parted ques patulous. (Stem very much branched.)

leaves 3-parted Treacle Wormseed. Banks of riv. A. 7. F. Dan. 923.

leaves 3-parted 815. CHEIRANTHUS. Germ. with a glandular
leaves 3-parted toothlet on both sides. Cal. closed, 2 of
leaves 3-parted the leaflets gibbous at the base. Seeds flat
leaves 3-parted (oftener membranaceo-marginate. GAERT.).

leaves hairy below Cheiri'. 1. C. Leaves lanceolate, acute, smooth, branches an-
leaves hairy below gular, stem shrubby.
leaves hairy below Wall-flower. Old walls, &c. P. 5. 6. Sheldr. 12.

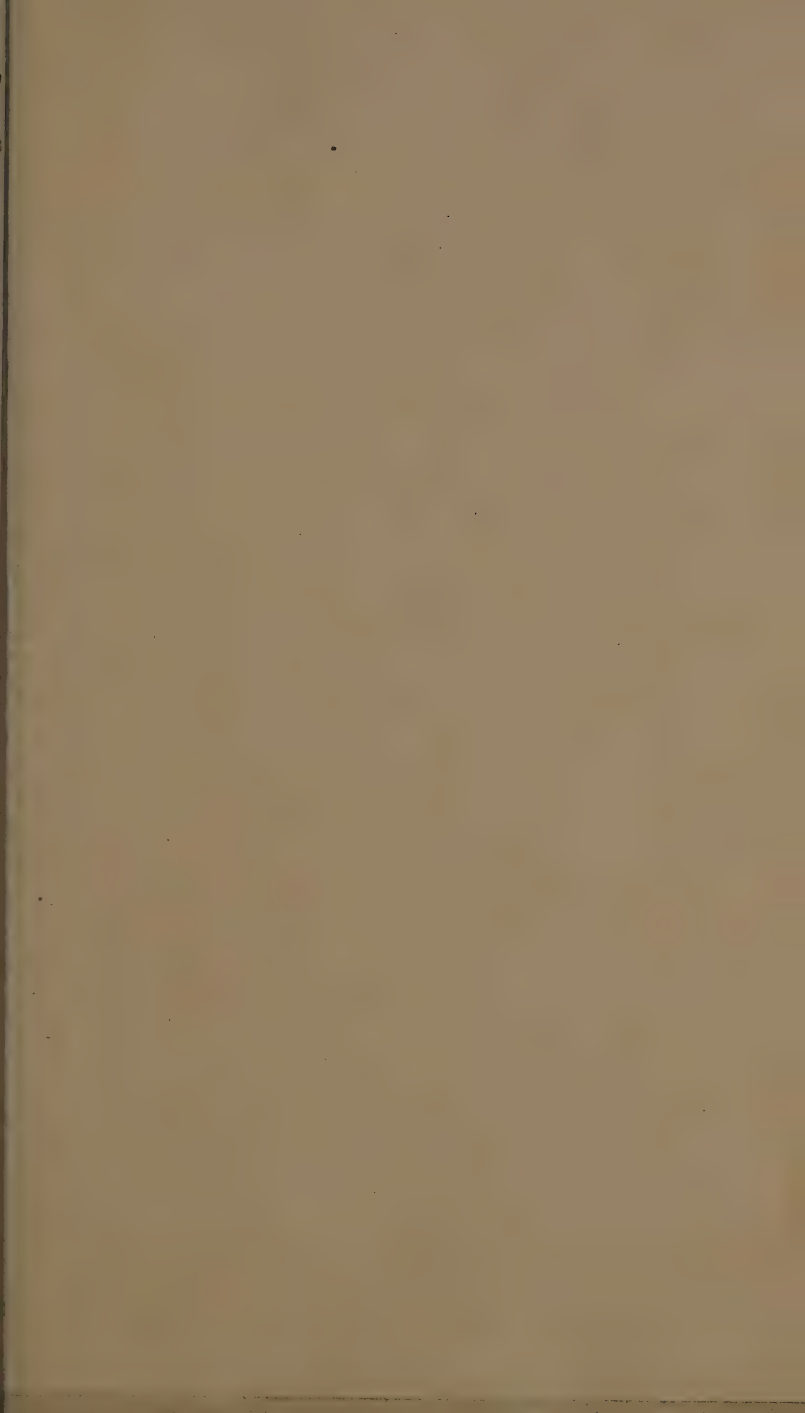
leaves hairy below sinuatus. 2. C. Leaves tomentous, obtuse, rather sinuate,
leaves hairy below branch-leaves entire, siliques muricated. *leaves hairy below*
leaves hairy below Sea Stock. Sandy sea shores. B. 6. 7. E. Bot. 462.

leaves hairy below erysimoi'- 3. C. Leaves lanceolate, toothed, naked, stem erect,
leaves hairy below des. very simple, silique 4-cornered. (Leaves lan-
leaves hairy below ceolate, very entire, siliq. 4-cornered. HUNB.)

Wild Stock. Godstow, Oxfordsh. B. 6. 7. Ger. 457.

Raphanus raphanistrum - Part of the Silique - It is without
valves; many-celled, jointed, becoming necklase. Make
the cells are bony, *separate*, in a longitudinal series, perforate
at each end for the passage of the two umbilical cords, which in
all of them, each cord bearing a seed, in the alternate cells; see
one in a cell





Thlaspi Bursa Pastoris - ^{char. 11th} Wides of this shape
attached on each side of
a central Placenta by a long funiculus



TETRADYNAMIA. SILIQUOSA. Hesperis. 147

817. HES'PERIS. *Petals turned obliquely. Glands within the shorter stamens. Siliques stiff and straight. Stigma forked at the base, converging at the end. Cal. closed. Siliques 4 sided*

1. H. Stem simple, erect, leaves somewhat hastate, toothed, petals obtuse. *inodo'ra. Stem branched. Leaves simple or forked. Scentless Damewort. Past. B. or P. 5. 6. F. D. 924. Leaves singly woolly on both sides - flower pinkish*

818. AR'ABIS. *Glands 4 nectariferous, one within each of the calyx-leaflets, like a reflected scale. (Siliques long, compressed, linear, entire, knobbed at the end. WITH.)*

1. A. Leaves petioled, lanceolate, very entire. *thalia'na. (Root-leaves ovato-lanceolate, toothed.)*

Wall-cresse. Walls. A. 5. Curtis.

2. A. Leaves toothed, hispid; root-leaves (some- what) spatulate, stem-leaves (toothed) half-embracing, oblong, siliques 2-edged, (slender,) erect. *stric'ta. Stem tufted. Leaves dark green. Huds. - flower white. Auring, below reddish*

Rough Wall-cresse. Rocks, &c. A. 5. Velley.

3. A. Leaves embracing the stem, siliques bent backwards, flat, linear, cal. rather (not at all) wrinkled. *Turri'ta. leaves toothed hairy - root leaves oblong belinked - petals white*

Tower Turkey-pod. Old walls. A. 5. 6. E. Bot. 178.

Obs. This plant does not possess the generic character of Arabis, two of the glands being situated within the shorter stam., and two without the longer as in Brassica. See E. Bot.

820. BRAS'SICA. *Cal. erect, converging. Seeds globular. A Gland between each of the shorter stamens and pistil, and between each of the longer and calyx.*

1. *Style somewhat obtuse.*

1. B. Leaves cordate, embracing the stem, smooth; root-leaves rough, very entire, siliques 4-cornered. (All the leaves smooth. *orienta'lis. Stem branched from the bottom, leaf smooth. Petals white.* POLLICH.)

Perfoliate Cabbage. Cornfi. A. 6. Jacq. Aus. 282.

2. B. Root and stem slender, stem-leaves uniform, cordate, sessile, (smooth; Root-leaves lyrate, somewhat hispid.) *campe'stris. Siliques veined, reticulate-triangular, beak long*

— Bradley, in Suffolk. A. 6. F. Dan. 550.

3. B. Root caulescent, fusiform. (Nearly allied to the genus Sinapis, from the calyx spreading. *Nal'pus. Leaves smooth upper leaves heart shape PERS.) long rootiest colewort. embeal. glaucous beneath.*

Wild Navew. Ditch-banks. B. 5. 6. Mart. 103. Lower leaves lyrate

Cultivated - Root nutritive used as a potherb. seeds

id much oil; used in wool-combing and for other purposes. cabs eaten cattle and are also used as manure

Brassica caapa - roots tuberculate to men and cattle either raw or
 dressed; root slightly acid; juice of the root with sugar used in
 colds and hoarseness; also fermented for a common sort of cyder;
 seeds pressed for oil - young shoots used for a pot herb

148 TETRADYNAMIA. SILIQUOSA. Brassica.

- Root leaves* Ra'pa. *silica cylindrical* 4. B. Root caulescent, orbicular, depressed, fleshy.
lyrate rough stem-leaves Turnep. Cornfields. B. 4— Mart. 49. & 50.
lower rough whole olera'cea 5. B. Root caulescent, cylindrical, fleshy.
flow yellow illeg; trulose Sea Cabbage. Cliffs on sea coast. P. 5. 6. Pet. 45. 6.
mura'lis 6. B. Leaves lanceolate, sinuato-serrated (or pinna-
liligin lonic bald, sub tified); smoothish, stem erect, smooth. Huds.
leaf very short flow large WITH. *Sisymbrium murale* Lin. See *Sisym-*
chrom yellow - stem branched brium. Page 150.
leaves mostly monen'sis. 7. B. Leaves pinnatifid, pinnæ (segments) inciso-
radical fleshy petals serrated, stem almost naked, procumbent. Huds.
yellow veined WITH. *Sisymbrium monense* Lin.
 Procumbent Rocket. Sea shore. B. 5—7, Lightf. 15. 1.

821. SINA'PIS. Cal. spreading. Cor. claws erect.
 A Gland between each of the shorter sta-
 mens and pistil; and between each of the
 longer and calyx.

- Root woody arven'sis* 1. S. Siliques many-angled, toroso-turgid, smooth,
flow hispid bristles bent back longer than the two-edged beak. *Eaten as cabbage*
leaves water toothed Charlock. Cornfields. A. 5. Curt. 321. Mart. 101.
lower leaves lanna nil ba 2. S. Siliques hispid, beak oblique, very long, ensi-
stipid - upper leaves lyrate form. *Siliques 4 sided - seeds white*
 White Mustard. Cornfields, &c. A. 8. Curt. 332.
stem much branched nil gra 3. S. Siliques (somewhat 4-cornered) smooth, press-
leaves hispid, not leaves ed close to the raceme,
lower stem leaves bald Com. Mustard. Cornfi. A. 6. Woodv. 151. Mart. 51.
siliques upright bald

819. TURRI'TIS. Silique very long, angular. Cal.
 converging, erect. Cor. erect.

- stem simple gla'bra* 1. T. Root-leaves toothed, hispid, stem-leaves very
stiff 2 feet - petals white entire, embracing, smooth. *stem rapid - London*
siliques racemose Tower Mustard. Meadows, &c. A. 5. 6. Curt. 253.
stem upright hirsu'ta 2. T. All the leaves hispid, stem-leaves embracing.
12 inches, sticky hairs not Hairy Towerwort. Rocks, &c. P. 6. Park. 834. 6.
petals white - siliques 4 sided shining

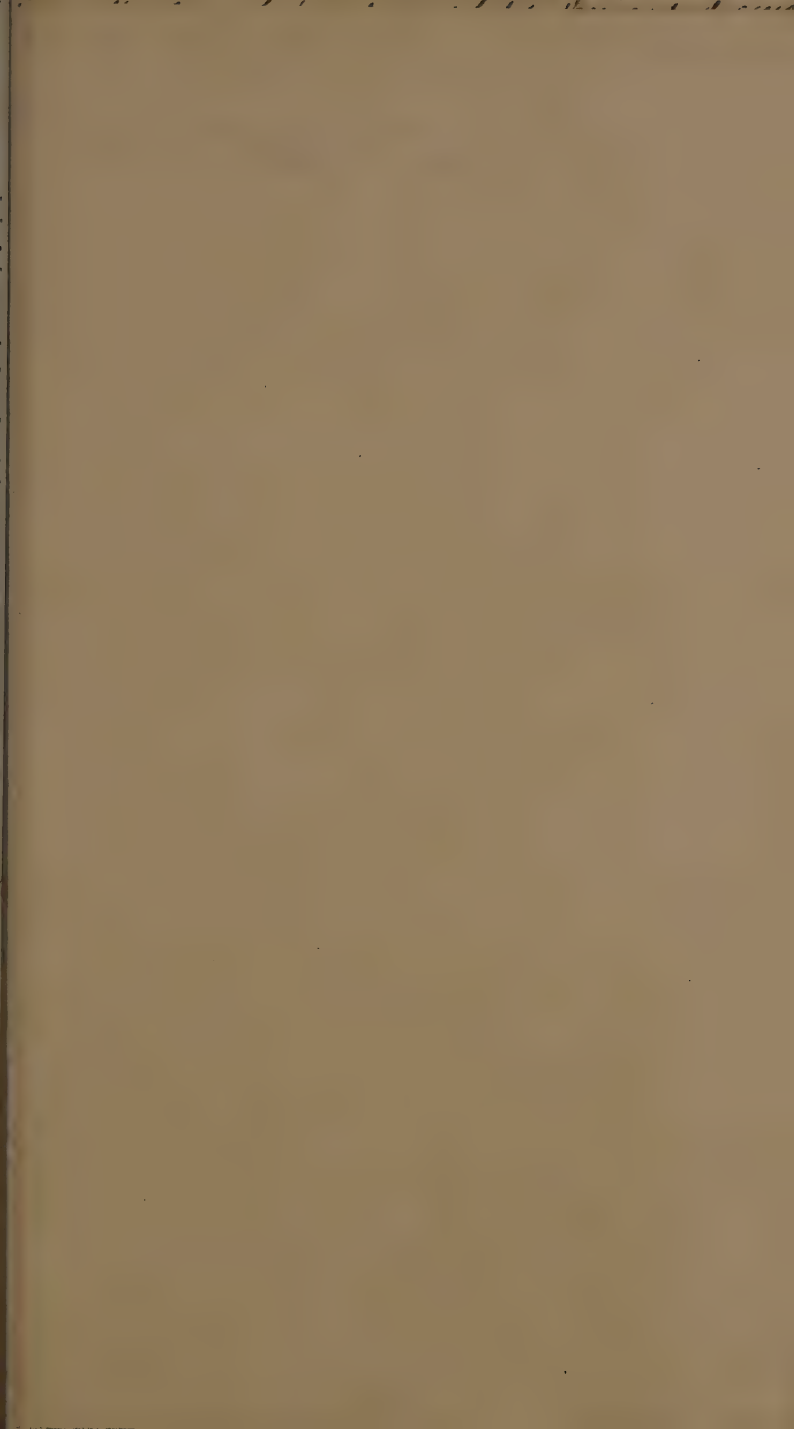
811. DENTA'RIA. Silique (cylindrical), bursting
 elastically, valves revolute. Stigma emar-
 ginate. Cal. converging longitudinally.

- stem simple bulbifera* 1. D. Lower leaves pinnate, upper ones simple.
Root creeping, toothed Bulbed Coralwort. Woods, &c. P. 4. 5. E. Bot. 309.
upper leaves bulbiferous
in the axils - roots purple

812. CARDAM'INE. Silique (long, 2-edged,) burst-
 ing elastically, valves revolute. Stigma en-
 tire. Cal. rather gaping. A Gland on each
 side between the shorter stamen and the
 calyx.

1. Leaves simple.

Brassica oleracea - Roots eatable but not so tender as those
 of the root; leaves eatable, when cold require boiling in two
 waters to remove the saltiness; and when cultivated, require to
 be protected, by being kept from the light



Asia - roots habitive to man and cattle either raw or
ed. and slightly acid; juice of the root with sugar.

Cardamine Pralensis - Mart. Pollen oval. B

2 semilunar discs stands at the
base of the Petals on the disk

Ascia sapa - roots habitually to men and cattle either raw or
boiled. and slightly acid; juice of the root with sugar and is

overlooked in the description.

Andamena amara - Slightly acid and bitter, eaten in salad
Impati alba - Young herb used as a salad in Spring; seeds acid
 but much milder than the black

TETRADYNAMIA. SILIQUOSA. Cardamine. 149

1. C. Leaves simple, ovate, very entire, on long bell'lidiso'-petioles. *g. stem length - Flowering stem - a long lia. as the leaves*
Daisy Ladies-smock. Scotland. P. 4. 5. F. D. 20. Petals white
2. C. Leaves simple, oblong, toothed. (Valves petra'a. & Root lower opening from the base, but not revolute.) *limited by ant.*
Arabis hispida. ? See E. Bot. P. 469. *leaves marked - stem green*
Mount. L. Welch mount. P. 5-7. F. Dan. 386. *leaves purple or white*
3. C. Root-leaves hastate, or lyrate, stem-leaves hastula'ta.
 lanceolate, entire. E. Bot. C. petra'a.
 Lightf.
Alpine Ladies-sm. Moist rocks. P. 7. E. Bot. 469.
2. Leaves pinnate.
4. C. Leaves pinnate, incised, stipuled, flow. ap- impa'tiens. *stem branchy*
 talous (pet. small). (Leaflets lanceolate, most- *upright angular*
 ly incised, stipules fringed. E. Bot.) *fruit racemous*
Impatient Ladies-s M. mead. A. 5. 6. E. Bot. 80.
5. C. Leaves pinnate, flowers tetrandrous. (Plant *hirsu'ta.* *leaves without*
 small, leaflets opposite, about 3 pairs with *stipules - leaflets petio.*
 an odd one larger, reniform, or circular.) C. *ed - hairy - stem branchy*
hirsuta. B. Huds. *flexuous, rarely stip.*
Hairy Ladies-sm. Grav. soil. A. 3-6. Barr. 455.
6. C. Stem flexuose, leaflets toothed, mostly alter- flexuo'sa.
 nate, unequal at the base. WITH, C. *hirsuta*
 Huds. Curt.
Zig-zag Ladies-s. Ditches, A. 5-7. Curt. 277.

Obs. "Leaves pinnate, leaflets roundish, or oblong, crenate, petioled, stipules none." E. Bot. 492. This is the char. of C. *hirsuta*, as given by Dr. Smith, who is decidedly of opinion that C. *hirsuta* and *flexuosa* are so far from constituting distinct species, that they are not even marked var. He adds, that the stam. are generally 6, in early, or starved flow. 4, that luxuriant specimens are most zig-zag, starved ones most hairy; and that C. *parviflora* Lin. is a very distinct species, not hitherto found in Britain. I am informed however that C. *hirsuta* does not become like the *flexuosa* on cultivation, and think the latter a strongly marked var. if not a distinct species.

7. C. Leaves pinnate, root-leaflets roundish, stem- praten'sis. *flowers small*
 leaflets lanceolate. *by a marked stigma read* *anthers yellow*
Common Ladies-sm. Meadows. P. 4. 5. Curt. 175.
8. C. Leaves pinnate, the axils stoloniferous. ama'ra. *root leaves roundish*
 (Anthers purple.—Stem-leaflets angular, sessile. STOKES.) *stem marked Petals white* *stem & angular*
Bitter Ladies-s. Moist mead. P. 4. 5. Curt. 158.

§13. SISYM'BRIUM. Siliq. opening with straightish valves. Cal. spreading. Cor. spreading.

Andamena pratensis - Flowers useful in Epilepsy and
gynaexia & to the liver & day - Probably anthe'mintic
 we use the flowering tops
Andamena - Seeds acid and astringent and often
 as a subacetic acid.

150 TETRADINAMIA. SILIQUOSA. *Sisymbrium*.

1. *Siliques declining, short.*

- leaves hairy Nastur-*
petals white tium.
siliques dehiscent
leaflets decurrent
petals golden
fruit prostrum amphib-
petals a long um.
in calyx - stem rooting
stems spreading
stem upright
fruit very short
1. *S. Leaves pinnate, leaflets somewhat cordate (ovate). Stem declinate, erect at bottom*
Water-cresses. Springs, &c. B. 6. 7. Mart. Let. 21.
2. *S. Siliques oblongo-ovate, leaflets lanceolate, serrated. Root creeping - Stem erect angular*
Creeping Water-cress. Watery pl. P. 6. 7. Curt. 153.
3. *S. Siliques oblongo-ovate, leaves pinnatifid, serrated. (Pet. longer than the calyx. WITH.)*
Var. 1. Leaves deeply pinnatifid. Var. 2. With., who considers it as *S. amphibium terrestre* γ. Lin. on the authority of the figures referred to by Vaillant. Kniph. 3. Ger. 240. 2. *fl. yellow*
— 2. *aquaticum*. β. Lin. Huds. Var. 1. With. Leaves simple, toothed, serrated. F. Dan. 984. Ger. 234. 2. *fl. yellow*
Radish Water-cress. Watery places. P. 6—8.
terres'tre. 4. *S. Root annual, leaves pinnatifid, siliques full of seeds, pet. shorter than the calyx. WITH. S. amphibium. α. palustre. Lin. Huds. See With.*
Annual Water-cr. Edges of ditches. A. 6—9. Curt.

2. *Stem naked.*

- muralis.* *S. Almost stemless, leaves lanceolate, sinuato-serrated, smoothish; scapes roughish, ascending*
—See *Brassica muralis*. Page 148.
monensis. *S. Stemless, leaves pinnato-dentate, rather hairy, scapes smooth.—See Brassica monensis. P. 148.*

3. *Leaves pinnate.*

- fl. 2 year So'phia.* 5. *S. Petals less than the calyxes, leaves decomposi-*
tree, anchy. Petals yellow to-pinnate. i. 2 *densely pinnate leaflets linear, la.*
leaf quite Irid. 6. *S. Leaves runcinate, toothed, naked, stem smooth,*
bold acid - stem erect siliques erect.
erect, branched at top Broad-leaved Water-cress. Rubbish. A. 5—8. Curt.

leaves pointed - Petals yellow - siliques very long

Sisymbrium Sophia - seeds drank in wine, used in the head,
flux, and other profluvia, also against worms; herb used in
lystria cases

CLASS XVI.

MONADELPHIA.

TRIANDRIA.

(XXII. *Juniperus*.)

DECANDRIA.

832. GERA'NIUM. *Pistil* 1. *Caps.* (*Fruit*) 5-grained, beaked.(X. *Oxalis*. XVII. *Spartium*. *Genista*. *Anthyllis*. *Ulex*. *Ononis*.)

POLYANDRIA.

842. LAVATE'RA. *Pist.* many. *Cal.* outer 3-cleft. *Arils* 1-seeded, verticillate.841. MAL'VA. *Pist.* many. *Cal.* outer 3-leaved. *Arils* 1-seeded, verticillate, numerous.839. ALTHÆ'A. *Pist.* many. *Cal.* outer 9-cleft. *Arils* 1-seeded, verticillate.(XXI. *Pinus*. XXII. *Taxus*.)

DECANDRIA.

832. GERA'NIUM. Monogynous. *Stigm.* 5. *Fruit* beaked, 5-grained. (*Style* 1. *Pet.* 5, regular. *Nect.* 5 glands at the base of the longer *stam.* *Fruit* beaked, separating into 5 seed-cases, each tipped with a long simple naked awn. E. BOT.)*Obs.* The following arrangement of the species is from Withering.

1, Corol regular, peduncles 1-flowered.

- Fl. wood & sanguin- cum.* 1. *G.* Leaves 5 (or 7) -parted, (segm.) trifid, orbicular. (Pedunc. jointed, stem procumbent. WITH.)
Stem hairy (Bloody Crane's-bill. Dry past. P. 7—9. *E. Bot.* 272.)
Petals pale red, veined Var. 2. *β.* Huds. Leaves larger, paler, more deeply
very large - fruit smooth ly divided. RAY syn. 360.
Stem knotted lancast'ri. 2. *G.* Leaves circular, 5, or 7-parted, segm. 3-cleft,
leaves deeply en'se pedunc. jointed, stem erect. WITH. *G. sanguineum* *γ.* Huds. See Ray syn. 360. 16.
5-lobed nodos small, pale — Isle of Walney, Lanc. P. 7. 8. *Pet.* 64. 11.
fl. colour, or white, veined w. red

2. Petals emarginate, or bifid, pedunc. 2-flowered.


A. Perennial.




- Root tuber. pyrendi-* 3. *G.* Lower leaves (reniform) 5-parted, many-cleft,
stem 3 feet cum. rounded, upper ones 3-lobed, (lobes 3-cleft,) stem erect. (Seed-cases even, acutely keeled,
Peduncles 2 flowered slightly tomentous, seeds smooth. *E. Bot.*)
Petals purple, rarely white Mount. Crane's-bill. Pastures. P. 6. 7. *E. Bot.* 405.
hairy at bottom - anthers small 4. *G.* Petals emarginate, stem-leaves (5 or) 3-lobed,
stem 4 sided, erect spreading entire, serrated, glossy underneath.
Root tuber. nodosum. Knotty Crane's-bill. Mount. pl. P. 7. 8. *Ger.* 947, 2.
leaves red 5. *G.* Leaves (scarcely) somewhat peltate, 5 (or 7)
Peduncles 2 flowered -lobed, inciso-serrated, stem erect, pet. (entire,
Root woody cum. or slightly) emarginate. (Arils hairy. *E. Bot.*)
stem 3 feet - leaves soft Brachy Wood Crane's-b. Mount. past. P. 6. 7. *E. Bot.* 121.
hairy reticled - Brachy B. Annual.
lanceol - Petals purple, veined w. blood red, hairy at bottom

- Stem hirsute dissectum.* 6. *G.* Leaves 5-parted and trifid (or many-cleft), pet.
Arils erect down emarginate, as long as the calyx, arils villous.
Petals purple, anthers (Peduncles shorter than the leaves.)
purple Jagged Crane's-bill. Road sides. A. 5—8. Curtis.
Stem 1 foot columbi- 7. *G.* Pedunc. longer than the leaf, leaves 5-parted,
leaves 1 foot cum. many-cleft, arils smooth, calyxes awned (large)
Stem hirsute erect down Long-stalked Cr. Cornfields. A. 6—8. *E. Bot.* 259.
by long bristles, pressed down 8. *G.* Petals emarginate, stem depressed, leaves
Stem 1 foot pusillum. reniform, palmate, (segm. nearly) linear, acute.
leaves doubly lobed (Leaves reniform, palmate, incised, seed-cases
anthers only 5 even, keeled, tomentous with erect hairs; seeds
smooth. *E. Bot.*) *G. molle* *β.* Huds. *G. mal-*
vaefolium. With. Scop. *G. columbinum* &c.
DILL. in Ray. 359. 9. tab. 16. f. 2.
Small-flowered Cr. Waste gr. A. 6—9. *E. Bot.* 385.

Obs. It differs from *G. molle* in its seed-coats being hairy, and not wrinkled; from *G. rotundifolium* in its awnless calyx, and emarginate petals. See With. Vol. 2. page 603, who

Geranium molle

ovules somewhat of this form  appear
like an ascending seed.

*Geran. Robert.*th Pollen of this shape  that is
nearly round but flattened on one side —
stamens 10 of equal length. Calyx has a
terminal awn on each sepal, the hairs appear
appear simple (on the calyx) and have a little knob on
the extremity like the guard on a cow's horn. The same
kind of hairs are on the leaves — to this glandular
structure it perhaps owes its smell — The ovaries are placed
on a thickened glandular disk, each ovary contains two
ovules.  — as the flower decays it is found that one only
is fertilized and each ovary is filled by a single seed 
The style above the ovary before the petals drop is thickened &
appears like another ovary, this part as the capsule ripens
is elongated.
Pian devent.th Stamens ten, the filament spreading
out at the base, calyx with an awn, hairs
of stem simple turned downward without any
terminal gland —

considers this species as a dwarf, or starved plant of his
G. malvifolium.

9. *G.* Peduncles and floral-leaves alternate, petals molle. Root perispermous, bifid, calyxes awnless, stem somewhat erect. *Stems many, hairy*
Soft Crane's-b. Dry banks. A. 4—10. Curt. 141. *Leaves many, very soft*
3. Petals entire, pedunc. 2-flowered. *Corolla purple, rarely white*

A. Perennial.

10. *G.* Pedunc. solitary, opposite the leaves, calyxes somewhat awned, stem erect, petals undulated. *phæum. Stem 2 feet*
(Arl keeled, hairy below, wrinkled above. *points large, red*
E. Bot.) *Petals blackish. 11 c*
claw white
Dusky Crane's-b. Mount. past. P. 5. 6. E. B. 322.
11. *G.* Leaves somewhat peltate, many-parted, praten'se. *Stem 3 feet*
wrinkled, acute, pet. entire, *filaments with a woolly - Petals not erect*
Meadow Crane's-b. Meadows. P. 6. 7. Curt. 250. *very large blue*
12. *G.* Pedunc. (generally 2-flowered) about 3-flow- *mariti- Stem depressed*
ered; flow. pentandrous, leaves cordate, cre- *mum. head & rays by*
nate, incised, rough, stems depressed. (Pet. *leaves hooked Corolla*
frequently none.) *pink - stem*
Sea Cr. Sandy sea shores. P. 6—10. Pet. 65. 1.

B. Annual.

13. *G.* Calyx pyramidal, angular, (the angles) ele- *lu'cidum.*
vated and wrinkled; leaves 5-lobed, rounded, *hairy, thin kidney shape*
Shining Crane's-b. Walls, &c. A. 6—8. E. B. 75.
14. *G.* Petals mostly entire, as long as the calyx, *rotun'difo- Leaves cloth like*
stem prostrate (spreading), leaves reniform, *lium. Stem much branched*
incised. (Arls even, hairy, seeds reticulated. *Flowers small, rose-red*
E. Bot.)
Round-leaved Cr. Walls, &c. A. 5—7. E. Bot. 157.
15. *G.* Calyxes hairy, with 10 angles. (Leaflets 5, *robertia- Root in pairs*
or 3 together, lobes pinnatifid.) *anther reticul. ?* *mum. Stem hairy*
Herb Robert. Walls, &c. A. 4—8. Curt. *reddish - Petals purple*
Var. 2. shining. Leaves smaller and more deep- *ly white -*
ly divided; the whole plant shining. Woodw.

4. Pedunc. many-flowered, leaves pinnate.

16. *G.* Pedunc. many-flowered, flow. pentandrous, *moscha- Stem hairy*
leaves pinnate, incised, cotyledons pinnatifid. *tum. leaflets oblong*
(Flow. in umbels, leaflets mostly on short pe- *inequal on both*
ticles, unequally cut. WITH.—Odour re-
sembling musk.)
Musk Cr. Dry pastures, &c. A. 5—10. Ger. 941.

Geranium Robertianum^x - *which is used as a cathartic*
in nephritis and calculous complaints -

Root periform
white stems
many-branched, hairy
leaves ovate acute serrate
peduncles longer than leaves
flowers purple
stem hairy rather hispid
leaves 6 inches. Petals small or
equal to calyx. Flowers purple
some having a purple spot
at bottom

G. pedunc. many-flowered; flow. pentandrous,
leaves pinnate, incised, obtuse, stem-branched.
(Flow. in umbels, leaflets sessile, pinnatifid,
obtus. pet. entire. WITH.) *stamen distinct from
Hemlock Crane's-b. Road sides, &c. A. 4—10. Curt.*
Var. 2. *fine-leaved.* 7. Huds. 2. With. Leaflets
pinnatifid, segm. linear. *G. pimpinellæ foli.*
DILL. in Ray. 358. 5.
3. *hoary.* 3. Huds. 3. With. Cor. white, larg-
er, stems thicker, leaves less finely cut. RAY
syn. 357. 8.

Obs. 1. The British species of *Geranium* are divided in the following manner by Linnæus:

1. MYRRHINA. Stam. 5 antheriferous. Cal. 5-leaved. Fruit declining. *G. Cicutarium, moschatum, and maritimum.*
2. BATRACHIA. Stam. 10 antheriferous. Pedunc. 2-flow. Perennial. *G. phæum, nodosum, sylvaticum, pratense, and pyrenaicum.*
3. Stam. 10. antheriferous. Pedunc. 2-flowered. Annual. *G. molle, robertianum, lucidum, columbinum, dissectum, rotundifolium, pusillum.*
4. Stam. 10 antheriferous. Pedunc. 1-flowered. *G. sanguineum.*

Obs. 2. L'HERITIER has divided this genus into three; viz. *Geranium*, *Pelargonium*, and *Erodium*. To the first he refers all the species which have 10 perfect stam., to the second all those which have 7, and to the third all those which have 5 only. As we have no British species with 7 stam., it is unnecessary to give the char. of *Pelargonium* here; but the character of *Erodium*, as comprehending the division *Myrrhina*, is annexed.

--- *ERODIUM.* Cal. 5-leaved. Cor. 5-petalled. Nect. scales 5, alternating with the filam. and nectariferous Glands sitting on the base of the stamens. Fruit 5-grained, rostrate, beaks spiral, bearded inwards. L'HERITIER.

And also the new character of *Geranium*,

--- *GERANIUM.* Cal. 5-leaved. Cor. petalled, regular. Nect. glands 5, melliferous, adhering to the base of the longer filam. Fruit 5-grained, rostrate, beaks simple, naked, (neither spiral, nor) bearded. L'HERITIER.

POLYANDRIA.

842. LAVATE'RA. Cal. double, the outer 3-cleft. Arils many, 1-seeded.

1. L. Stem arboreous, leaves 7-angled, tomentous, plaited, pedunc. crowded; 1-flowered; axillary. Sea Tree Mallow. Sea shores: B. 7—10. —

841. MAL'VA. Cal. double, the outer 3-leaved. Arils very numerous, 1-seeded.

Stem herb. *Sparganorea.*
6 feet naked, leafy at top
Petals purplish red
with dark blotches at
the base

1. *Leaves angular.*

1. M. Stem declining, leaves subrotundo-cordate, *pusilla*.
slightly 5-lobed, flow. peduncled, generally
in pairs, pet. as long as the calyx. E. Bot.
M. *parviflora*. Huds.

— Pembrosesh. B. 7. E. Bot. 241.

2. M. Stem prostrate, leaves cordate-orbicular, in *rotundis*. *Stem branches*
distinctly 5 (or 7)-lobed, peduncles, when in *folia. Stem many*
fruit, declining. *Petal. flesh-colour longer than the calyx.*

Dwarf Mallow. Road sides. A. 6—10. Curt. 157.

3. M. Stem erect, herbaceous, leaves 7-lobed, a- *sylvestris. Root fusiform*
cute, peduncles and petioles hairy. (Stem *whit. & green rather rough*
rough, leaves 5, or 7-lobed, toothed, leaflets of *sometimes variegated*
the outer calyx partly united at the base. *Petal. purple & green*
WITH.) *Leaves 3 times as long as the calyx*

Com. Mallow. Hedges, &c. A. 6—8. Curtis.

4. M. Stem erect, root-leaves reniform, incised, *moschata. Root woody*
stem-leaves 5-parted, pinnato-multifid. (Leaf- *Petal. large, coral red*
lets of the outer calyx distinct. Flowers ge- *rarely white*
nerally of a musk-like scent—Hairs upon the *outer calyx very small*
stem solitary, erect.) *consisting of thin slices*

Musk Mallow. Road sides. P. 7. 8. Curt. 228.

5. M. Stem erect, leaves many-parted; roughish, *whitish hairy*
(Stem rough with hairs fascicled, expanded.) *alcea?*

Obs. Mr. Curtis informs us that in M. *Alcea* the calyx has a
protuberating ring at the base, and the outer calyx is
formed of 3 ovate leaflets, whereas the M. *moschata* has
not this ring at the base of the calyx, and the calyx-leaf-
lets are lanceolate.

839. ALTHEA. Cal. double, the outer 9-cleft.

Anils very numerous, 1-seeded.

1. A. Leaves simple, tomentous (slightly 5-lobed). *officina'lis. Root fusiform*
Marsh Mallow. Salt marshes. P. 8. E. Bot. 147. *herb velvety fl. flesh &*
2. A. Leaves trifid; piloso-hispid, smooth (or vil- *hirsuta.*
lous) on the upper side, pedunc. solitary, 1- *Leaves heart shape*
flowered. (Outer calyx 8-leaved.) *bald above*

— Near Cobham. RAYER, Jacq. Aust. 2. 170.

Althea officinalis — Plant medicinal, used
in infusion, and also in powder.

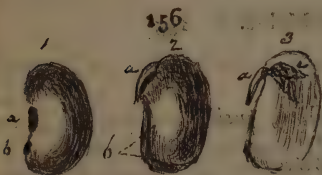
a Calyx b Petals & Stamens

c Root



30/57

- 1 Seed of Kidney - bear a Hilum & micropyle
2 Embryo deprived of epispem a radicle
6 cotyledons



3 Same size of cotyledons upward
a radicle & gemmae, which produces
the two primordial leaves -

CLASS XVII.

DIADELPHIA.

HEXANDRIA.

849. FUMARIA. Cal. 2-leaved, Cor. ringent,
gibbous at the base, nectariferous. Filam.
with 3 anthers.

3 3 3 radicle

OCTANDRIA.

850. POLYALA. Cal. 2 segments wing-like.
Cor. standard cylindrical. Stam. connected.
Caps. obcordate, 2-celled,

DECANDRIA.

1. All the stamens connected.

857. SPARTIUM. Filam. adhering to the germen.
Stigma hairy, adnate (growing to the upper
side of the style. WITH:).

859. GENISTA. Pistil depressing the keel. Stig-
ma involute.

864. ANTHYL'IS. Cal. turgid, including the
legume.

881. U'LEX. Cal. 2-leaved. Legume scarcely
longer than the calyx.

863. ONO'NIS. Legume rhomboid, sessile. Stand-
ard striated.

2. Stigma pubescent (without the marks of the first
division),

871. OR'OBUS. Style linear, nearly cylindrical,
villous above.

870. PY'SUM. Style keeled, and hairy above.

872. LATH'YRUS. Style flat and villous above.

873. VI'CIA. Style bearded under the stigma.

4 Seed of Indian Corn (Sea-Mais) germinating - a the body of the
formed of the sarinaceous albumen, b the cotyledon which is lengthened
and which contained within it the gemmae, which has pierced
it at its upper and lateral part (c) - d the coleorhizon which contains
the primordial radicle & the point where the radicle b has pierced the coleorhizon

Fig 5 opposite - A kidney bean which has germinated a radicle
 & the two cotyledons, which see become seminal leaves, & the stem
 & the leaflets of the gemmule, forming the two primary leaves.

DIADELPHIA.

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3. Legumes 2-celled (without the marks of the first and second division).

892. *ASTRAG'ALUS*. Legume 2-celled, bent in to a curve.

4. Legume about 1-seeded (without the marks of the former divisions).

896. *TRIFO'LIUM*. Legume scarcely longer than the calyx, 1 or 2-seeded. Flowers (mostly) capitate.

5. Legume somewhat jointed (sometimes spiral. St.).

887. *HEDYS'ARUM*. Legume with roundish, compressed joints. Keel very obtuse.

884. *ORNITH'OPUS*. Legume jointed, bowed.

885. *HIPPOCRE'PIS*. Legume compressed, membranous; one suture with deep notches in the middle.

899. *MEDICA'CO*. Legume spiral, membranaceous-compressed. Pistil pressing down the keel.

6. Legume 1-celled, many-seeded (without the marks of the former divisions.)

874. *ER'VUM*. Cal. 5-parted, nearly equal, almost as long as the corol.

897. *LO'TUS*. Legume cylindrical, stuffed with cylindrical seeds.

Obs. The following arrangement of the British genera is taken from the *Systema Vegetabilium*.

1. Pinnate without an odd leaflet. *Orobis*, *Pisum*, *Lathyrus*, *Vicia*, *Ervum*.
2. Pinnate with an odd leaflet. *Astragalus*, *Hedysarum*.
3. Trifoliate. *Trifolium*, *Lotus*, *Medicago*, *Genista*, *Ononis*.
4. Umbellate. *Lotus*, *Ornithopus*, *Hippocrepis*.

HEXANDRIA.

849. *FUMA'RIA*. Cal. 2-leaved. Cor. ringent. Filam. 2, membranous, each with 3 anth.

1. Corols 1-spurred.

1. F. Root bulbous, solid, stem simple, floral-leaves intermedia. Stem simple. Bracted medow-shaped, longer than the peduncle leaves. Leaflets, cut at the tip. Spike solitary. Petals 4 in at bottom, purple at the tip. Spur cylindrical as long as the peduncle.

Fumaria officinalis - Juice of the plant alterative, useful in scurvy, and other chronic diseases, also as a cometic.

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DIADELPHIA. HEXANDRIA. *Fumaria*.

Root bulbous and
scabrous

palmate, as long as the corol. WITH. *F. bulbosa* β. Lin. Spikes loose flowers simple

— Levan's park, &c. P. 4. 5. With. P. 29.

Capnoi des. 2. *F. Legumes* linear, 4-cornered, stems diffuse, with acute angles.

Plant glaucous. Stem angular

Stem hairy *officinalis*. 3. *F. Pericarps* 1-seeded, racemous, stem diffuse.

Leaves more than twice as long as broad

Leaflets wedge-shaped, lobes acute

Petals rose *capreolata*. 4. *F. Pericarps* 1-seeded, racemous, leaves climbing,

flower red at first

F. spica - leaves ternate

Leaflets reverse ovate

wedge-shaped, partial petioles

cinchurlike, convolute

Stem 3 part very much branched

spicata. 5. *F. Pericarps* 1-seeded, spiked, stem erect, leaflets

stem branched, hairy

leaves more than twice as long as broad

impendent leaflet 8-part

linear channelled

flowers small pale

Stem climbing *clavicula* - 6. *F. Siliques* linear, leaves tendril-bearing (petioles

lower leaves *ta*.

binate, upper binate

tendril bearing - stem reddish-flattened - leaves juicy glaucous below

— Old walls, near Castleton. — Kniph. 11.

officinalis. 3. *F. Pericarps* 1-seeded, racemous, stem diffuse.

Common Fumitory. Cornfields. A. 5—8. Curt. 112.

capreolata. 4. *F. Pericarps* 1-seeded, racemous, leaves climbing,

somewhat tendrilled (not sending forth tendrils,

but performing their office with the petioles).

Ramping Fum. Gardens, &c. A. 8—10. Curtis.

Obs. Besides its greater disposition to climb, it is distinguish-

from *F. officinalis* by its flowers being only half as many,

(6—12) one-third larger, and the mouth more closed. See

Curtis. Spikes loose few flowered

spicata. 5. *F. Pericarps* 1-seeded, spiked, stem erect, leaflets

filiform.

Var. 2. *tenuifolia*. *F. spicata* β. Lin. Leaves very

slender, flowers white, near Montp. Bauh. pin.

Fine-leaved *F.* Near Greenwich. — 8. Ger. 1089. 3.

Obs. This variety has been lately found near Epsom by Mr.

Forster, who thinks it a distinct species. See Symons. P. 200.

6. *F. Siliques* linear, leaves tendril-bearing (petioles

ending in tendrils. E. Bot.) Petals white

Climbing Fum. Hedges, &c. A. 6—9. E. Bot. 103.

OCTANDRIA

851. POLY'GALA. Cal. 5-leaved, 2 leaflets wing-like, coloured. Legume obcordate, 2-celled.

1. Crested (flow. with a pencil-like appendage).

calycis unguis *vulgaris*. 1. P. Flow. crested, racemous, stems herbaceous, simple, procumbent, leaves linear-lanceolate. (Root-leaves ovato-lanceolate, smaller.)

Milkwort. Heaths, &c. P. 6. 7. E. Bot. 76.

DECANDRIA

858. SPAR'TIUM. Stigma longitudinal, villous above. Filam. adhering to the germ. Cal. extended downwards.

scopa'rium. 1. S. Leaves ternate and solitary, branches unarmed, angular.

Com. Broom, Dry pastures, S. 5. 6. Curt.

Polypala only May 10 The stophiola is very visible the seed
being of this figure



Broom. - Top, and seeds in. inferior direction - used in dropp-
suds, roasted, substituted for coffee; young flowers pickled
for sauce - Ashes tolerable pure Carb. of potash; - When sheppac

DIADELPHIA: DECANDRIA. Genista. fed 159 upon it in

859. GENIS'TA. Cal. 2-lipped, $\frac{2}{3}$. Stand. ob-
long, reflected downwards from the pist. *Young used for carpet-
and stam. brown, and then black, may be*

1. Unarmed: made into Flax.

1. G. Leaves lanceolate, smooth, branches striated, *tingetoria. Plant in*
cylindrical, erect. (Legum. cylindrical.) *direction distinct, seed*
Dyer's Weed. Pastures, &c. S. 7, 8. E. Bot. 44. *legumin bald* *legumin bald* *legumin bald*

2. G. Leaves lanceolate, obtuse, stem tubercled, *pilo'sa.*
decumbent. *Flowers axillary nearly sessile*
Hairy Greenweed. Pastures. S. 5. 6. E. Bot. 208.

2. Thorny.

3. G. Thorns simple, flowering branches unarmed, *an'glica.*
leaves (ovato-) lanceolate. *Flowers cithon - legumin bald*
Petty Whin. Heaths, &c. S. 5. 6. E. Bot. 132.

864. ANTHYL' LIS. Cal. ventricose. Legume *calyx ovate oblong*
roundish, covered (with the calyx).

1. A. Herbaceous, leaves pinnate, unequal, head *vulnera'ria.*
double. *leaves pinnate hairy below* *calyx white corol golden*
Kidney Vetch. Calcar. soil. P. 5-8. E. Bot. 104. *stem hairy - root*

881. U'LEX. Cal. 2-leaved. Legume scarcely
longer than the calyx.

1. U. Leaves villous, acute, thorns scattered. *europæus.*

Var. 1. Corol longer than the calyx, thorns
longer than the corol. α . Lin. Huds. V. 1.
With. P. 2-8. Ger. 1319. 1. *Young shoots bruised*

— 2. Corol as long as the calyx, thorns short-
er than the corol. β . Lin. Huds. V. 2. With.
P. 9, 10. Ger. 1321. 6. *are used to feed sheep*
and cattle - used
also when ripe & dry
to light fires -

Obs. Mr. Forster considers these var. as distinct species, and
has given them the following names and characters.

europæus. 1. U. Branches angular, calyxes woolly, shorter
than the corol. U. *europæus* α . Huds.

Nanus. 2. U. Branches somewhat cylindrical, calyxes
nearly naked, as long as the corol. U. *eu-*
ropæus β . Huds. and With. See Symons.
P. 160.

Ray (syn. 475. 2.) expresses a doubt whether the latter
be not a distinct species, and remarks that it is smaller,
has shorter thorns of a paler green colour, and that it
flowers later than the other.

863. ONO'NIS. Cal. 5-parted, segments linear. *Corolla bell. shaped.*
Stand. striated. Legume turgid, sessile.
Filam. connate without a division. *leaf*

1. Flowers nearly sessile.

- lean hairy spinosa*. 1. O. Fl. racemous, solitary, leaves ternate, and solitary, branches thorny (smooth).
hairs brown - lanceolate
flowers in pairs longer than fl. leaves Thorny Rest-harrow. Barren past. P. 7. Mart. 129.
- arvensis*. 2. O. Fl. racemous, 2 together; leaves ternate, the upper solitary, branches unarmed, somewhat villous. O. *inermis*. a. *arvensis* Huds.
Calyx bell shaped 5-ent Hairy Rest-h. Cornfields. P. 6. Gerard 1142. 3.
- Branches villous
 Leaves ~~very~~ separate
 (Roots in decort. used in gravelly complaint)
 Var. 2. Stems prostrate, leaves pubescent. O. *arvensis*. g. *repens* Huds. V. 2. With. Ray syn. 332. 3. Not O. *arvensis* Lin.
 Creeping Rest-h. Sea shore. P. 6. 7. Dill. elth. 25. 28.

Calyx 5-ent 871. OR'OBUS. Style linear. Cal. obtuse at the base, upper segments deeper, shorter.

- Flowers many sylvaticus*. 1. O. Stem branched, hirsute, decumbent, leaflets racemous 1-seeded, yellowish about 7 pair.
with purple lakes Bitter Vetch. Hedges, &c. P. 5—7. Lightf. 16.
- Flowers racemous 1-seeded*
purple red, growing blue
flowers bushy tuberosus. 2. O. Leaves pinnate, lanceolate, stipules semi-sagittate, very entire, stem simple (naked below, winged above).
 Heath Pea. Meadows, &c. P. 4. 5. Curtis.

- P. maritima in maritime*
first observed on the beach
observed in Suffolk during the famine of 1795
standard purple 870. PISUM. Style triangular, keeled and pubescent above. Cal. 2 upper segments shorter. (Legume inflated.)
blood colour 1. P. Petioles flattish above, stem angular, stipules sagittate, peduncles many-flowered.
wing, keel bluish flushed Sea Pea. Sea shores. P. 8. F. Dan. 338.
872. LATH'YRUS. Style flat, villous above, broader upwards. Cal. 2 upper segments shorter.

1. Peduncles (mostly) 1-flowered. (L. *hirsutus*.)

- Flowers small Aph'aca*. 1. L. Tendrils leafless, stipules sagittato-cordate.
drooping Yellow Lathyrus. Sandy cornfields. A. 6—9. Curt.
- Nisso'lia. 2. L. Leaves simple (grass-like, very long), stipules (2, very small) subulate.
 Crimson Grass-vetch. Borders of cornfi. A. 5. Curt.

2. Peduncles (about) 2-flowered.

- stem winged hirsutus*. 3. L. Pedunc. about 3-flowered (mostly 2-flowered), tendrils 2-leaved, leaflets lanceolate, legumes hirsute, seeds rough.
tendrils 3-ent Calyx hairy
flowers purple Rough Lathyrus. Cornfields. A. 7. J. B. ii. 305.

4. *Tare* everlasting a meadow with long deep crimson has been
 proposed for forage; but cattle are not fond of it

DIADELPHIA. DECANDRIA. Lathyrus. 161

3. Peduncles many-flowered (hirsutus).
4. L. Tendrils 2-leaved, very simple, (or 2 to 3- praten'sis. *calyx hairy*
 cleft) leaflets lanceolate. *corolla gold yellow legumen bald.* x
Tare Everlasting. Meadows. P. 7. 9. Curt. 170.
5. L. Tendrils 2-leaved, leaflets ensiform, inter- sylves'tris. *hairy leaves*
 nodes of the stem membranous. *flowers purple, wings, & everlasting pea*
Wild Lathyrus. Woods, &c. P. 7. 8. Ger. 1229. 1. *violet*
6. L. Tendrils 2-leaved, leaflets lanceolate, inter- latifo'lius.
 nodes of the stem membranous. *flowers may large rose col.*
Broad-leaved Vetchling. Hedges. P. 7. 8. Mart. 8. *tendrils 5-ribbed*
7. L. Tendrils many-leaved, stipules lanceolate. palus'tris.
Marsh Vetchl. Moist mead. P. 7. 8. E. Bot. 169. *flowers bluish violet*

873. VI' CIA. Stigma bearded transversely on
 the under side. (Legume generally with
 knot-like protuberances. WITH.)

1. Peduncles elongated (many-flowered).

1. V. Leaflets oval, stipules slightly toothed. sylva'tica. *leaves many pairs*
Wood Vetch. Thickets, &c. P. 7. 8. E. Bot. 79. *tendrils branched*
2. V. Flow. imbricated, leaflets lanceolate, pubes- Crac'ca. *leaves solitary*
 cent, stipules entire. *flowers purple to flesh colour*
Tufted Vetch. Hedges, &c. P. 7. 8. Curt. 310.

2. Flow. axillary, nearly sessile.

3. V. Legumes sessile, mostly in pairs, erect, leaf- sativa. *tendrils 2 or 3-ribbed*
 lets retuse, stipules marked (underneath with *flowers solitary or in pairs*
 a black depressed spot as if burnt, toothed, *purple* - *herb used green*
 seeds compressed, calyx-teeth very long, *or dried for powder.*
 straight). *Com. Tare.* Mead. A. 4—6. Mart. 116. E. B. 334. *given to pigeons*
- Var. 2. Leaves narrower, somewhat linear. β .
nigra. Lin. V. lathyroides α . & β . Huds. V. 3.
 With. Ger. 1227. 4.
4. V. Legumes pedicelled, generally 4 together, sepium. *stem 2 feet*
 erect, leaflets ovate, very entire, the outer *tendrils branched*
 ones decreasing. (Calyx-teeth shorter than *flowers purpleish or blue*
 the tube of the corol. PERS.)
Bush Vetch. Hedges, &c. P. 5. 6. F. Dan. 699.
5. V. Legumes sessile, solitary, erect, smooth, leaf- lathyroi'. *leaves have small*
 lets (about) six, the lower obcordate. (Sti- *des. downy leaflets*
 pules semi-sagittate; not spotted, very entire, *reverse heart shape*
 seeds cubic, warty.) *flowers bluish or white.*
- Strangle Tare.* Dry pastures. A. 5. E. Bot. 30.
6. V. Legumes sessile, reflected, hairy, solitary, 5- lu'tea. *stipules blackish*
red - *flowers solitary*
sulphur yellow

seeded; standards smooth. (Stipules blood-coloured. E. Bot.)

Yellow Vetch. Weymouth, &c. P. 7. E. Bot. 481.

hybrida. 7. V. Legumes sessile, (solitary) reflected, hairy, 5-seeded, standards villous. (Leaflets emarginate.)

Bastard V. Glastonbury Tor hill. P. 6. E. Bot. 482.

laevigata. 8. V. Legumes sessile, solitary, reflected, smooth; stems erect; stipules greenish; leaves smooth. E. Bot. V. hybrida. Huds. With.

Smooth-podded Sea V. Weymouth. P. 7—9. E. B. 483.

Stand: large bithynica. 9. V. Legumes peduncled, solitary, erect, leaflets 4, had. coloured wings & keel white, oval-lanceolate, stipules toothed.

Peduncle 1 or 2 flowered. Rough Vetch. Meadows. A. 6—8. Jacq. hort. 147.

892. ASTRAG'ALUS. Legume (generally) 2-celled, gibbous.

1. Stems leafy, diffuse.

Stems procumbent. hypoglot'- 1. A. Caulescent, prostrate, legumes capitate, ovate, leaflets small & tis. (with a channel along the back) compressed, hairy beneath, flowers purple, sometimes white, hairy, the point reflected. (Legumes covered with white soft hairs.)

Purple Mount. Milkwort. Past. P. 6. 7. E. Bot. 274.

Stems prostrate glycyphyl'- 2. A. Caulescent, prostrate, legumes nearly triangular, bowed, leaves longer than the peduncle, leaflets oval.

to fruit in Aug? Wild Liquorice. Pastures, &c. P. 6. 7. E. Bot. 203.

Root altho' sweet diminishes rather than increases thirst.

2. Scape naked, without a leafy stem.

leaves radicle, leaflets white uralen'sis. 3. A. Stemless, scape erect, longer than the leaves, legumes subulate, (oblong,) inflated, villous, erect.

flowers violet, spiked bracted linear

Hairy Mount. Milkw. M. past. P. 7. E. Bot. 466.

Calyx tubular 5-toothed 896. TRIFO'LIUM. Flowers mostly capitate. Legume scarcely longer than the calyx, not opening, deciduous. Red Root. Hairy, or

always rise out of the earth mostly formed like seed Obs. The character of Trifolium, however easy to be made out by its habit, is formed with great difficulty, its inflorescence being so very various, viz. racemous, umbellate, fascicled, capitate, and spiked.

leaves - leaves ternate or bipinnate with an odd one

1. Meliloti, legumes naked, many-seeded.

Flowers yellow M. or'ni- 1. T. Leg. naked, 8-seeded, generally 3 together, in loose racemes thopodiodi'- des. (Leaves small, cordate, deeply toothed. PERS.)

Birds-foot Trefoil. Sandy past. A. 6. 7. Curt. 124.

Stem 2 feet high M. offic- 2. T. Legumes racemous, naked, 2-seeded, wrinkled, flowers golden na'lis. acute, stem erect.

When dry fragrant - The distilled water altho' only slightly odorous improves the flavour of other substances

Fufof. pratense. May 8 The style is long the legume very
small apparently containing two or
three seeds - too minute yet to be examined

Melilot Trefoil. Cornfi. A. or B. ? 6. 7. Mart. 72.

2. *Lotoidea*, legumes covered, many-seeded.

3. T. Heads like umbels, legum. 4-seeded, stem re'pens. *no white*
leaflets ovate, stem naked, pink, crested, and often spotted at base.
 creeping. *considered as indicating a rich soil*

Dutch Clover. Meadows, &c. P. 5—9. Curt. 193.

4. T. Heads like umbels, leg. 4-seeded, stem as, hy'bridum?
 cending. T. repens β. hybridum. Huds.

— Fast. near Battersea. P. 5—9. Vaill. 22. 5.

3. *Lagopoda*, calyces villous.

4. T. Heads villous, 5-flowered; central tuft rigid reflected, inclosing the fruit. (Stem villous, pedunc. 3—4-flowered, after flowering bent towards the earth.) *subterra' - Corolla white*
neum. Leaves alone appear above the sand.

Subterraneous Tref. Heath. A. 5—8. Curt. 128.

5. T. Heads sessile, hemispherical, rigid, calyces glomera' *Calyx bell shaped*
 (naked, 10) -striated, patulous, equal. *tum. Corolla rose col'.*

Round-headed T. Sandy mead. A. 5. 6. Curt. 227.

6. T. Heads sessile, lateral, ovate, calyx-segm. sca'brum. *Hard knotted*
 unequal, rigid, recurved. *Calyx purplish - Corolla white. Leaflets even*
 Hard-knotted Tr. Chalky past. A. 5. 6. Barr. 840. *hemispherical*

7. T. Heads sessile, mostly lateral, ovate, cal. stria'tum.
 (hairy, 10) striated, rounded. *leaflets reverse ovate serrated*

Soft-knotted Tr. Dry pastures. A. 6. Ray 13. 3.

8. T. Spikes villous, oval, teeth of the calyx setaceous, villous, equal. (Wings of the corol with a blood-coloured spot within.) *arven'se. Corolla white or*
fls. cobalt - colour
hermament, aromatic when dried

Hare's-foot Tref. Sandy past. A. 7. 8. Curtis.

9. T. Spikes loose, corols nearly equal, stipules me'dium. *Leaves rather*
 subulate, converging, stems flexuose, branched. *glaucons beneath edge*
 Afz. WITH. FL. SUEC. T. Alpestre *hairy - propagates by the*
 Huds. T. flexuosum. Jacq. With. ed. ii. *root - Cable not fond of it*
tell it is perished -

Zig-zag Tref. Mount. past. P. 7. E. Bot. 190.

Obs. Persoon has always found the stipules diverging.

P. 727.

10. T. Spikes globular, somewhat villous, surrounded by opposite membranous stipules; corols monopetalous. (Spikes dense, cor. unequal, 4 of the calyx-teeth equal, stipules awned, stems ascending. AFZELIUS.) *pratens'se. Leaves bald*
2 lob purple - Corolla
unequal, purple

Purple Tref. Meadows. B. 5—9. J. B. ii. 374.

Var. 2. smaller. β. Huds. V. 2. With. *flowers large pink col'?*
 obcordate, the upper generally opposite, head naked. DILL. in Ray 328. 5. Ray 13. 1.

— 3. cultivated. β. Afzel. 7. Huds. Vol. 3.

With. Larger, more erect than var. 1. more tender, less durable, leaves paler, &c. See Ray syn. 328. 6.

Broad Clover. Meadows, &c. F. Dan. 989.

corolla sulphur - ochroleu - 11. T. Spikes villous, stem erect, pubescent, lower
yellow *chum.* leaflets obcordate. (Lower tooth of the cal. as long as the tube of the corol. WITH.)

Sorbi *Brimstone Tref.* Dry meadows, &c. B. 6. 4. Curt.

mariti - 12. T. Spikes hairy, globular, stipules lanceolate, e-
mum. rect, calyx-teeth spreading and dilated after flowering, leaflets obovato-lanceolate, upper leaves opposite. E. Bot. WITH. T. *Stellatum*

Huds., not Lin. *Teasel-headed Tr.* Sea coast. A. 6. 7. E. Bot. 220.

4. *Vesicaria*, calyxes inflated, ventricose.

fragile - 13. T. Spikes (heads) roundish, calyxes inflated, (up-
rum. per lip) 2-toothed, reflected, stems creeping. *Strawberry Tr.* Moist meadows. P. 8. Curt.

5. *Lupulina*, standards of the corol inflected (permanent).

procum - 14. T. Spikes oval, imbricated, standards deflected,
bens. permanent, stems procumbent. (Spikes oval, closely imbricated, many-flowered, stems wide-spreading. WITH.)

Hop Trefoil. Dry meadow, &c. A. 6. Curt. 161.

Obs. The *Trifolium procumbens* of English authors is considered by Lin. as a var. of *T. filiforme*. Afz. See With. V. 3. P. 655.

agra - 15. T. Spikes oval imbricated, stand. deflected, per-
um? manent, calyxes naked, stem erect.

Obs. The plant, which the English Botanists consider as the *T. agrarium*, is according to Afz. the *T. procumbens* of Lin. See With.

F. Dan. 558.

Flowers small *filifor'me.* 16. T. Spikes somewhat imbricated (3—5-flowered), standards deflected, permanent, calyxes pedicelled, stems procumbent.

Least Hop Tr. Sandy heaths. A. 5—7. Ray 14. 4.

Var. 2. *Less Hop Tref.* Spikes 8—20-flowered. Flow., when in seed, bent back. Ray 14. 3. Curt. 307.

corolla white suffoca - 17. T. Without stem or scape, flowers nearly sessile,
leaves alone *tum.* from the root.

— Near the Sea, Yarmouth. A. 6—9. J. Aus. 60.

appear above the dark
calyxes with lanceolate, acute, recurved, longer than corol

tuse. Legume with 1-seeded joints.

1. H. Leaves pinnate, legumes 1-seeded, prickly; *Onobrychis*.
wings of the corol as long as the calyx, stem ^{flowers with bracts}
elongated. ~~Colours deep rose colour, streaks~~ Good food for

Com. Saintfoin. Meadows, &c. P. 6. 7. Mart. 47.

884. ORNITH'OPUS. Legume jointed, cylindri- leaves pinnate
cal, bowed. with an odd leaflet. Heads

1. O. Leaves pinnate, legumes incurved. *perpusil - few flow'*
Com. Bird's-foot. Sandy banks. A. 5-9. E. B. 369. lus. wings red
red - very small variegated red green

885. HIPPOCRE'PIS. Legume compressed, (many-celled,) crooked, notches several along one suture.

1. H. Leg. peduncled, (umbellate) crowded, bow-
ed, repand on the outer margin. *Stem prostrate, leaves pinnate*
Tufted Horse-shoe Vetch, Chalk. P. 5. 7. E. B. 31. *with an oval leaflet*

899. MEDICA'GO. Legume compressed, (bent or) spiral. Keel of the corol bent down from the standard.

1. M. Pedunc. racemous, legumes twisted, stem sat'va. Stem 2 feet
erect, smooth. ~~Flowers violet.~~ Good feeds on rich ground very late
Lucern Medick. Pastures. P. 6, 75. Curt. 120. ~~Cult. from 18th century on a~~

2. M. Pedunc. racemous, legumes crescent-shaped, *falca'ta*.
stem prostrate. *Flavida, siliqua erecta compressa*

Yellow Medick. Sandy past. P. 7. Mart. 86. 87.

3. M. Spikes oval, legumes reniform, 1-seeded, lupulina.
Stems procumbent, *legumen hairy, black*

Trefoil Medick. Cornfields. A. 5—8. Curt. 120.

Var. 2. WITH. Legumes about 10 on one peduncle, smaller, slightly compressed, not echinate, but rough with numerous tubercles. RAY syn. 333. 4. *H. ox.* ii. 15. 14.

4. M. Pedunc. about 3-flowered, legumes prickly, *arabica*.
 stipules toothed, leaflets obcordate, stems *leaves bald, toothed*
 spreading. WITH. M. *polymorpha* ζ. Lin. *with black flowers*
 α. Huds. *toothed, lacinate* *yellow*

Heart Trefoil. Sandy past. A. 5. 6. *Curt.* 176.

5. M. Legumes mostly 3 on a peduncle, prickles *min'ima*.
hooked, stipules entire. WITH. M. *poly.* *Plant very small.*
morpha λ . Lin. *very downy leaves not*

— Sandy places. A. — *H. ox.* ii. 15. row 2. 15.

6. M. Peduncles many-flowered, legumes roundish, thorny, hoary, leaves woolly. WITH. M. *muricata*.
polymorpha μ. Lin. *Leaves not glaucous*

— Orford, in Suff. A. 5. 6. *H. ox.* ii. 15. 11.

ably 5
etc

874. ER'VUM. Cal. 5-parted, as long as the corol.

tetrasper- 1. E. Peduncles mostly 2-flowered, seeds globular, 4.
mum. Smooth Tare. Cornfields. A. 6. Curt.

Var. 2. Seeds 5 to 7, rarely 4. Stem extremely branched. WITH.

hirsu'tum. 2. E. Peduncles many-flowered, (flow. 2—5) seeds globular, 2. (Stem somewhat winged on both sides, plant smooth, legume hirsute.)

Wild Tare. Sandy cornfields. A. 6. 7. Curt.

897. LO'TUS. Legume cylindrical, stiff and straight (generally with cells). Wings converging upwards longitudinally. Cal. tubular.

1. Peduncles many-flowered, forming a head.

corniculatus. 1. L. Heads depressed, stems decumbent, legumes cylindrical, spreading.

Bird's-foot Clover. Pastures, &c. P. 6. 8. Curt. 107.

Var. 2. WITH. β . Lin. 7. Huds. Larger, stem more erect, leaves and heads woolly. J. B. ii.

356. 1.

3. tenuissimus. WITH. β . Huds. Ray syn.

334. 2. Leaves linear, legume narrower.

4. WITH. δ . Huds. Dill. in Ray syn. 334.

Like var. 2, but less hairy.

5. WITH. ϵ . Huds. Dill. in Ray syn. 334.

Leaves hoary underneath.

6. smooth. Plant entirely hairless, stipules semi-ovate, filaments club-shaped. See With.

Obs. Schkuhr divides *L. corniculatus* into *L. arvensis*,

"Stem somewhat quadrangular, prostrate," and *L. uliginosus*,

"Stem branched, cylindrical, calyx pilosb-squar-

rosc." See Persoon.

Hy. hirsutum androscedum. Leaves of the lower, when dark red, resembles claret; leaves used as a dressing to wounds and ulcers.

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POLYADELPHIA. POLYANDRIA. Hypericaceae.

8. H. Calyxes serrato-glandular, stem cylindrical.

CLASS XVIII.

9. H. Calyxes serrato-glandular, stem cylindrical.

POLYADELPHIA.

10. H. Calyxes serrato-glandular, stem cylindrical.

POLYANDRIA.

902. HYPERICUM. Cal. 5-parted, inferior. Cor. 5-petalled. Styles 1, 3, or 5. Caps. cellular. (Cells of the same number as the styles. Filam. many, formed into 3, or 5 sets at the base.)

1. Flowers trigynous.

1. H. Fruit berry-like, stem shrubby, 2-edged. *Androsæa*.
Tutsan. Woods, &c. P. 7—9. Curt. 265. *mum.*
2. H. Stem 4-cornered, herbaceous. (Leaves ovate; *quadran-*
calyx-leaves lanceolate, acute.) (with *hampar. 100*) *gula're.*
St. Peter's Wort. Moist hedges. P. 7. Curt. 231.
3. H. Stem 2-edged, leaves obtuse, with pellucid *perfora-*
dots. (Anthers with a black spot. Stigm. *tum.* Root *creeping*
blood-coloured. Calyx-leaves lanceolate.) *Stem erect, pedately*
Com. St. John's W. Dry banks. P. 7. E. Bot. 295. *golden w. purple spots & lines*
4. H. Stem somewhat 4-cornered, herbaceous, *du'brum.*
leaves ovate, calyx-leaflets very obtuse. *Root creeping*
LEERS. Stem indistinctly 2-edged, leaves *short, bright*
obtuse without pellucid dots, calyx-leaves el- *scabrid - Petals*
liptical. E. Bot. *Entire yellow streaked w*
Imperförate St. J. W. Sapey. P. 7. 8. E. Bot. 296. dark purple
5. H. Fl. axillary, solitary, stems 2-edged, pros- *humifu'-*
trate, filiform, leaves smooth. *Petal. golden* *sum. not glan?*
Trailing St. John's Wort. Heaths. P. 7. Curt. 162.
6. H. Stem cylindrical, creeping, villous, leaves *elo'des.* *Root fib. on*
villous, somewhat circular. *Leaves scabrid from the base*
Marsh St. John's W. Bogs. P. 7. E. Bot. 109. *Petals yellow with*
greenish red veins; glandular -
7. H. Calyxes serrato-glandular, stem cylindrical, *monta num.*
erect, leaves ovate, smooth. (Pet. obtuse, not *Flowers corymbose*
dotted, stigm. purple. LEERS.) *Anicled, terminal - Petals*
Mount. St. J. W. Mount. woods, P. 7. E. B. 371. *lanceolate, light* *arizably 5*
stem 2 feet *yellow* *prostate*

168 POLYADELPHIA. POLYANDRIA. Hypericum.

hirsutum. 8. H. Calyxes serrato-glandular, stem cylindrical, erect, leaves ovate, somewhat pubescent.

Stem sup. branched and downy, flower small, gold yellow Hairy St. John's W. Hedges. P. 6. 7. Curt. 182.

pub'chrum. 9. H. Calyxes serrato-glandular, stem cylindrical, leaves embracing the stem, cordate, smooth.

Stem 18 inches, reddish, add. branches, leaves opposite, glaucous, dotted underneath. (Leaves opposite, glaucous, dotted underneath.)

Panicle many flowered Upright St. John's W. Hedges, &c. P. 6. 7. Curt.

Flowered, corolla yellow

CLASS XIX.

SYNGENESIA.



POLYGAMIA ÆQUALIS.

1. *Semifloscular* of Tournefort, all the florets ligulate.

- 921. CICHOR'RIUM. Receptacle somewhat chaffy. Pappus about 5-toothed. Cal. calyced.
- 918. HYPOCHÆ'RIIS. Recept. chaffy. Pappus somewhat feathery. Cal. imbricated.
- 905. TRAGOPO'GON. Recept. naked. Pappus feathery, stipitate. Cal. simple.
- 907. PI'CRIS. Recept. naked. Pappus feathery, stipitate. Cal. calyced.
- 912. LEON'TODON. Recept. naked. Pappus feathery, stipitate. Cal. imbricated with loose (flexible) scales.
- 914. CRE'PIS. Recept. naked. Pappus hairy. Cal. calyced, scales of different forms.
- 911. PRENAN'THES. Recept. naked. Pappus hairy. Cal. calyced, about 5-flowered.
- 909. LACTU'CA. Recept. naked. Pappus hairy, stipitate. Cal. imbricated, scales with a scarious margin.
- 913. HIERA'CIIUM. Recept. naked. Pappus hairy, sessile. Cal. imbricated, ovate.
- 908. SON'CHUS. Recept. naked. Pappus hairy, sessile. Cal. imbricated, gibbous.
- 919. LAP'SANA. Recept. naked. Pappus o. Cal. calyced.
- 916. HYOS'ERIS. Recept. naked. Pap. crowned with a calycle. Cal. nearly equal.

2. *Capitate*.

- 929. CARLI'NA. Cal. radiate, rays coloured.

The number of Stamina in the order Syngenesia are almost invariably 5 consequence of constant abortion, the flowers contain hermaphrodite acts, male and female florets - Rich.^d

a Sprig of *Antennaria santonica*, the flowers of
Ant. maritima and *abrinthia* are very similar
 b A lower leaf of *Ant. abrinthia* —
 c A flower leaf of *Ant. Maritima* —

SYNGENESIA.

The lower leaves of *Ant. Santonica* much like c but not quite so much divided.

323. *ARC'TIUM*. Cal. scales incurved, and hooked at the point.
 925. *CAR'DUUS*. Cal. ventricose, with thorny scales. Recept. hairy.
 927. *ONOPOR'DON*. Cal. ventricose, with thorny scales. Recept. honey-combed.
 924. *SERRAT'ULA*. Cal. nearly cylindrical, imbricated with scales rather acute, but awnless.

(*Centaurea nigra*.)

3. Discoid. (Florets all tubular.)

935. *EUPATO'RIUM*. Recept. naked. Pappus feathery. Cal. imbricated. Pistil very long.
 942. *SANTOLI'NA*. Recept. chaffy. Pappus o. Cal. imbricated, hemispherical.
 943. *ATHANA'SIA*. Recept. chaffy. Papp. chaffy. Cal. imbricated.
 932. *BI'DENS*. Recept. chaffy. Pappus awned. Cal. imbricated.

(*Senecio vulgaris*. *Tanacetum vulgare*. *Tussilago Petasites*. *Aster Tripolium*.)

POLYGAMIA SUPERFLUA.

1. Discoid. (Without ligulate florets.)

945. *ARTEMIS'IA*. Recept. nearly naked. Papp. o. Cor. o in the florets of the ray.
 944. *TANACE'TUM*. Recept. naked. Papp. with a slight margin. Cor. of the ray 3-cleft.
 950. *CONY'ZA*. Recept. naked. Papp. hairy. Cor. of the ray 3-cleft.
 946. *GNAPHA'LIUM*. Recept. naked. Pappus feathery. Cal. scariose with concave scales.

(*Senecio vulgaris*. *Tussilago Petasites* and hybrid. *Aster Tripolium*. *Erigeron*. *Bidens*.)

2. Radiate.

962. *BEL'LI*s. Recept. naked. Papp. o. Cal. simple, with equal scales.
 967. *MATRICA'RIA*. Recept. naked. Pappus o. Cal. with imbricated acute scales.
 966. *CHRYSAN'THEMUM*. Recept. naked. Papp. o. Cal. innermost scales scariose.

959. DORO'NICUM. Recept. naked. Papp. hairy.
Papp. of the ray o. A
956. IN'ULA. Recept. naked. Papp. hairy.
Anthers 2-bristled at the base.
951. ERIC'ERON. Recept. naked. Papp. hairy.
Cor. of the ray capillary.
955. SOLIDA'GO. Recept. naked. Papp. hairy.
Cor. of the ray about 6, remote.
957. CINERA'RIA. Recept. naked. Papp. hairy.
Cal. equal, simple.
953. SENE'CIO. Recept. naked. Papp. hairy.
Cal. scales sphacelated (blackish) at the ends.
652. TUSSILA'GO. Recept. naked. Papp. hairy.
Cal. scales somewhat membranous.
954. As'TER. Recept. naked. Pappus hairy.
Cal. somewhat squarrose.
970. AN'THEMIS. Recept. chaffy. Pappus o.
Cal. hemispherical.
971. ACHIL'LEA. Recept. chaffy. Pappus o.
Ray about 5-flowered. Cal. oblong.

POLYGAMIA FRUSTRANEA.

984. CENTAU'REA. Recept. bristly. Pappus hairy. Corol of the ray tubular.

POLYGAMIA NECESSARIA.

995. FILA'GO. Recept. naked. Papp. o. Fem.
Florets among the scales of the calyx.
990. CALEN'DULA. Recept. naked. Papp. o.
Seeds membranous.

(*Tussilago Farfara.* *Erigeron.*)

MONOGAMIA.

1005. JASIO'NE. Cal. common (10-leaved). Cor. 5-petalled, regular. Caps. inferior, 2-celled.
This last order has no affinity with the former, it has nothing in common with them but the union of stamina by their anthers —
1006. LOBE'LIA. Cal. 5-toothed. Cor. 1-petalled, irregular. Caps. inferior, 2-celled.
1007. VI'OLA. Cal. 5-leaved. Cor. 5-petalled, irregular. Caps. superior, 3-valved.
1008. IMPATIENS. Cal. 2-leaved. Cor. 5-petalled, irregular. Caps. superior, 5-valved.

(*V. Solanum.* *Gentiana* *Pneumonanthe.*)

POLYGAMIA ÆQUALIS.

921. CICHORIUM. Recept. somewhat chaffy.
Cal. calyced. Papp. about 5-toothed, indistinctly hairy.

1. C. Flow. in pairs, sessile, leaves runcinate.
Wild Succory. Cornfields. B. 7. 8. Curt. 241.

918. HYPOCHÆRIS. Recept. chaffy. Cal. somewhat imbricated. Papp. feathery.

macula'ta. 1. H. Stem nearly naked, branch solitary; leaves ovato-oblong, entire, toothed. (Seeds wrinkled. Leaves with reddish spots.)

Spotted Hypochaeris. Mount. past. P. 7. E. Bot. 225.

gla'bra. 2. H. Smooth, calyxes oblong, imbricated, stem branched, naked, leaves dentato-sinuated. (Cor. minute, calyx-scales even, seeds of the disk with a stipitate pappus, of the ray with a sessile one. HALLER.)

Smooth Cat's-ear. Sandy soils. A. 6—8. Curt. 145.

radical'ta. 3. H. Leaves runcinate, obtuse, rough, stem branched, naked; smooth, pedunc. scaly. (Corols large, calyx-scales with a ciliate keel.)

Long-rooted Hyp. Pastures, &c. P. 5—9. Curt. 152.

Var. 2. smaller. Stem simple, or with 1 flow. nearly sessile on the side. WOODW.

905. TRAGOPO'CON. Recept. naked. Cal. simple. Papp. feathery.

praten'sis. 1. T. Cal. (about) equal to the ray of the corol, leaves entire, stiff and straight (acuminate; pedunc. cylindrical).

Yellow Goat's-beard. Meadows. B. 6. E. Bot. 434.

2. T. Cal. longer than the ray of the corol, leaves entire, stiff and straight, pedunc. thicker upwards, corollets very narrow, truncated.

Purple Goat's-beard. Meadows. B. 5. F. Dan. 797.

907. PR'CRIS. Recept. naked. Cal. calyced. Pappus feathery. Seeds furrowed transversely.

echioi'des. 1. P. Outer perianth 5-leaved, larger than the awned inner one. (Bractea broad ovate heart-shaped)

Rough Picris. Cornfields. A. 7. 8. Curt. 150.

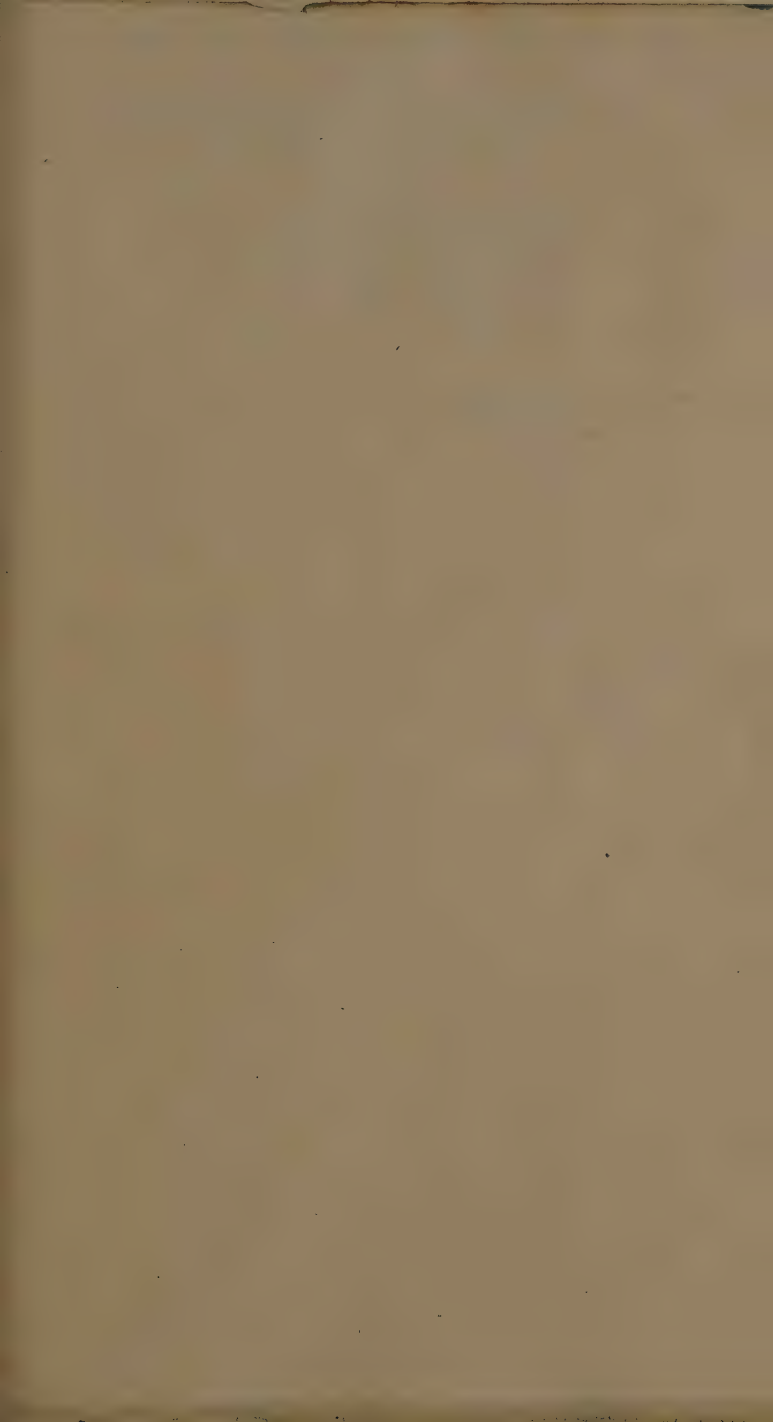
Hieracio- 2. P. Perianths loose, leaves entire, (root-leaves
i'des. toothed) peduncles scaly quite up to the calyx.

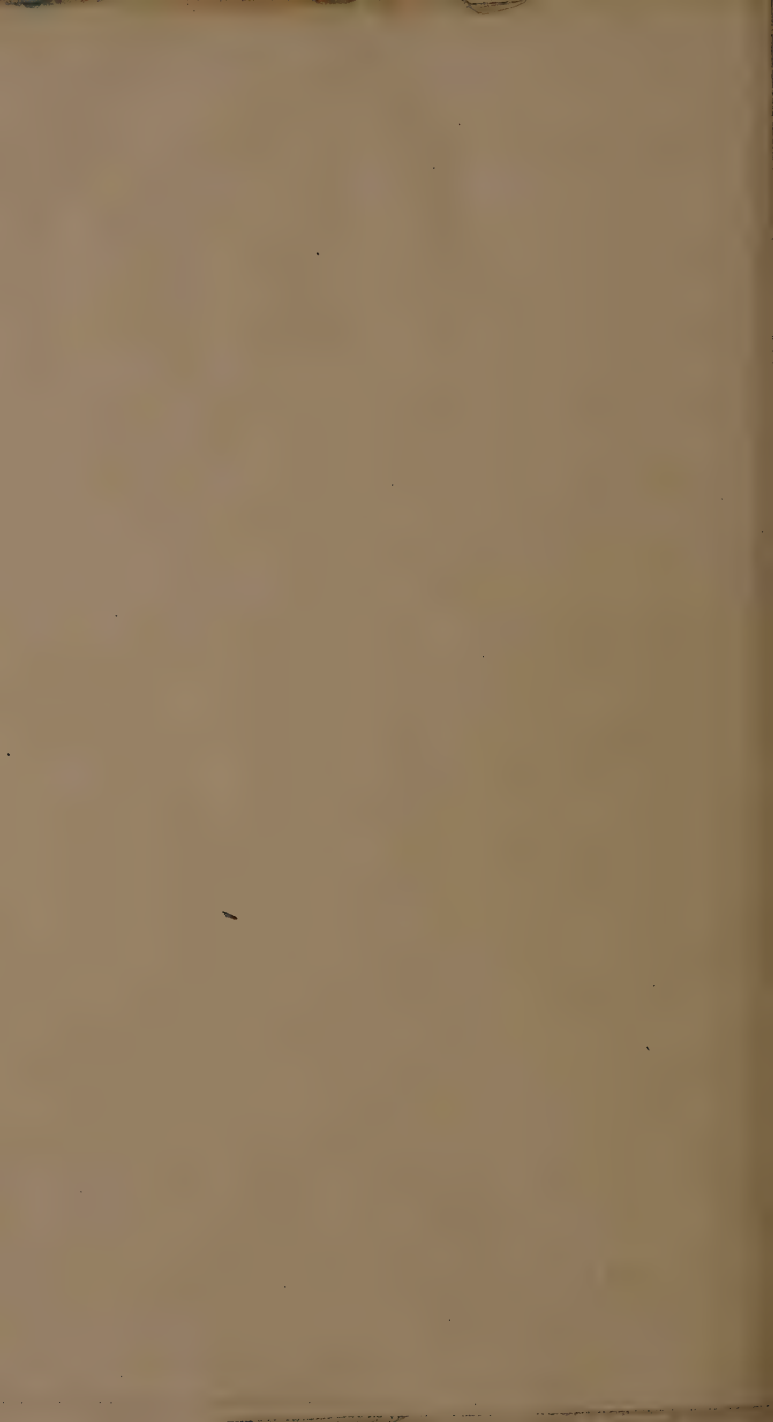
Picris porrifol: - Roots sweet used in salads or boiled in soup
very nutritious, useful in atrophy, cough, short breath difficulty
calamine is good.

Lespedeza

Pollen orbic. and covered by tubercles but not so prominent as in *Lespedeza*. The ovule is single and erect. The setae are at first sessile on the ovarium, and gradually lengthened by a long pedicel. The setae are of the same form and size as in *Lespedeza* but not so much developed.







(Plant rough with hooked bristles; branches purple on one side.) Hedypnois *Hieracioides*.

Huds. *edges of words in chalk*

Yellow Succory. Cornfr. B. or P. ? 7. E. Bot. 196.

912. LEONTODON. *Recept.* naked. *Cal.* imbricated with loosish scales. *Papp.* feathery. (*Recept.* naked, calyx imbricated, the inner scales parallel, equal. *Papp.* hair-like. WITH.; from whom the div. of the species is taken.) *Root puriform, leaves radical.*

Obs. Symons has divided this genus into two, viz.

TARAXACUM. "*Recept.* convex, naked. *Cal.* oblong, calyced with a double series of leaflets. *Papp.* capillary; stipitate."

Under this genus are included the two first species, the trivial name of the second being changed to *palustre*.

And

LEONTODON. "*Recept.* flattish, naked. *Cal.* imbricated with loosish scales. *Papp.* feathery, sessile."

This genus comprehends the 3 last species.

1. *Pappus stipitate* (capillary).

1. L. Outer scales of the calyx entire, reflected; officinale.
leaves smooth, runcinate, and acutely tooth- *Leaves blanchied.*
ed. WITH. L. *Taraxacum* α. Huds. *and the roots used in*
Com. Dandelion. Pastures, &c. P. 4—9. Curt. *Salads, used d. in salads*
Var. 2. L. *Taraxacum*. β. Huds. Leaves fewer,
narrower, more deeply laciniated, seed brown. *alt. true*
RAY syn. 171. 2. Pet. 11. 8.
2. L. Outer scales of the cal. erect, appressed, en- Tarax'a-
tire, leaves lanceolate, very entire, or only con.
toothed. WITH. L. *Taraxacum* δ. Huds.
— Moors. P. 6. Scop. 48.

2. *Pappus sessile* (feathery).

3. L. Stem branched, pedunc. scaly, leaves lanceo- autumnale.
late, toothed, very entire, smooth. (Cal. hairy. *Grass golden, than*
Papp. mostly sessile, finely feathery.) Hedyp- *of the circumference*
nois *autumnale*. Huds. *reddish on outside*
Autumnal Dandelion. Mead. P. 7. 8. Ger. 297. 3.
Var. 2. With. Leaves hairy. RAY syn. 164. 1.
— 3. With. Leaves laciniated. DILL. in R.
166. 2. Pet. 12. 2.
— 4. dwarf. With. Leaf acute. DILL. in R.
164. 3. Pet. 12. 3.
— 5. dwarf. With. Leaf obtuse, DILL. in R.
4. Pet. 12. 4.

Marsh Dandelion — This is distinguished *palustres*
from the *taraxacum* by leaves less in-
dented, outer scales of calyx not reflexed
and being altogether a smaller plant —

hispidum. 4. L. Whole of the cal. erect, leaves toothed, very entire, hispid, bristles forked. (Bracte linear—Leaves sinuated, somewhat runcinate, hairy, rough, scape thicker upwards, scape and calyx hispid with rigid hairs. PERSOON.)

Root perisperm
Rough Dandelion. Meadows. P. 5—9. Curt. 314.

Var. 2. β . Lin. L. *Taraxacum* γ . Huds. Var. 2. With. Leaves entire, somewhat denticulate, lanceolate, rough, scape 1-flowered. Ger. 302. 3.

hirtum. 5. L. Whole of the calyx erect (almost smooth), leaves toothed, rough-haired, bristles undivided. (Leaves rather rigid, dry to the touch, segm. oblique—Outer row of seeds without a pappus. HALLER.) Hed. *hispidum* β . Huds.

Deficient Dand. Heaths, &c. P. 6—8. Curt.

914. CRE'PIS. Recept. naked (generally). Cal. calyced with deciduous scales. Papp. (scarcely) feathery, stipitate. (Papp. capillary, sometimes stipitate. WITH.)

foetida. 1. C. Leaves runcinato-pinnate (pinnatifid), rough-haired, petioles toothed. (Calyx whitish, at first nodding, pappus stipitate, longer than the cal., recept. somewhat hairy. LEERS. Leaves embracing the stem, the uppermost one entire, (or) 1-toothed at the base. PERS.)

*Recept. one flowered
thicken at top
Corolla yellow
reddish on the back
Stems dispersed hairy*

Stinking Hawk's-beard. Dry past. B. 6. 7. E. Bot. 406.

tectorum. 2. C. Leaves lanceolato-runcinate, sessile, smooth, lower ones toothed.

*corolla yellow
stem branched mostly
bald, seldom hairy*

Smooth Hawk's-b. Pastures. A. 6—9. Curt. 327.

Var. 2. With. Leaves acuminate. DILL. in R. 166. 10. Pet. 12. 7.

— 3. With. Leaves entire, toothed, lanceolate, or ovate. See DILL. in Ray 164. 5. Pet. 12. 5.

— 4. Stems procumbent, leaves linear, narrow. WITH.

heut hispid bien'nis. 3. C. Leaves runcinato-pinnatifid, rough, toothed above at the base, cal. muricated (sometimes nearly smooth. ST.)

*small - involucrum
along pinnules
stems put coral yellow*

Rough Hawk's-b. Calc. past. B. 7. 8. E. Bot. 149.

*Corolla cylindrical
seals on 10 Recept. bald
bald, dotted flowers 5 or 6 yellow*
911. PRENAN'THES. Recept. naked. Cal. calyced. Papp. simple, nearly sessile. Florets in a single row,

muralis. 1. P. Florets 5, leaves runcinate.

herb woody
Wall Prenanthes. Walls. P. 7. Curt. E. Bot. 457.

909. LACTU'CA. Recept. naked. Cal. imbricated, cylindrical, with a membranous margin. Papp. simple, stipitate. Seeds smooth.

1. L. Leaves vertical, prickly on the keel. (Upper embracing the stem, sagittate; lower run-cinate, oblique, or vertical.) *Scar'iola.* *Flowers loosely branched, lemon colour.*
Prickly Lettuce. Rubbish, B. 8. E. Bot. 268.

Obs. It is distinguished from *L. virosa* by its paler colour, less spreading flower-branches, and vertical leaves.
 E. Bot.

2. L. Leaves horizontal, prickly on the keel, (and *viro'sa* margin,) toothed. (Stem prickly below.) *Stem and lvs 6 feet.*
Stinking Lettuce. Ditch-banks. B. 7. 8. Pet. 15. 2, *harricked over*
 Var. 2. Leaves entire. *L. scariola* B. Huds. *Flowers sulphur colour*
 STOKES. Pet. 15. 1. *Stems hispitated in a scabrous*
 3. L. Leaves hastato-linear, sessile, prickly on the *salig'na.*
keel. Stem tough, rush like and harrowed, bracted above
Least Lettuce. Chalky past. A. 8. Park. 783. 4. *snaps*

913. HIERA'CIIUM. Recept. (generally) naked. Cal. imbricated (sometimes calyced), ovate. Papp. (mostly) sessile, simple (rarely feathery).

1. Scape naked, 1-flowered.

1. H. Leaves very entire, ovate, tomentous underneath, stolons creeping. (Corol red on the outside.) *Pilosell'la.* *leaves above light green, beneath white.*
Mouse-ear Hawkweed. Past. P. 5—9. Curt. 279. *Flowers lemon colour, before opening, shaded with red on the outside*
 2. H. Leaves oblong, entire, toothed, scape almost *alpi'num.*
 naked, calyx hairy. *Scape solitary simple, with a lanceolate leaf*
Mountain Hawkw. Mount. P. 7. 8. Lightf. 18. *in the middle flowers golden yellow*
 3. H. Leaves lanceolate, toothed, smooth, scapes *Tarax'aci?*
 almost naked, cal. hirsute. *Hedynois autum-* *leaves mucronated toothed*
nale = *Taraxaci* Huds. *Stems 1 or 2 flowered. Harkness above*
 — Sides of mount, on moist gr. LIGHTF. P. 7. *downy hairs black*
Cholla golden
 4. H. Leaves petioled, ovate, hairy, toothed to- *ova'tum.*
 wards the base, teeth distant. CALEY,
 — Clefts of r. west side of Ingleborough. P. 8.

Obs. It is distinguished from *H. alpinum* Lin., and *villosum* Dicks. Lin. Tr. ii. 288., by the leaves not being attenuated into petioles, but perfectly ovate, and the whole plant being less hairy. Mr. CALEY.

2. Scape naked, many-flowered.

Flowers lemon yellow on both sides -
du'bium. 4. H. Leaves entire, ovato-oblong, stolons creeping. (Stem, and leaves rough-haired.)

Creeping H. Moist mount. P. 7. 8. F. Dan. 1044.

Auric'ula. 5. H. Leaves very entire, lanceolate, stolons creeping.

Narrow-leaved Hawkw. Mount. P. 7. Ger. 514. 3.

3. Stem leafy.

Stem rough sabau'dum. 6. H. Stem erect, many-flowered, leaves ovato-lanceolate, toothed, half-embracing the stem (lower ones elliptico-lanceolate. E. Bot.)

Flowers inside, leaves hearted beneath pale flowers golden yellow
Shrubby Hawkw. Hedges, &c. P. 7. 8. E. Bot. 349.
Var. 2. β. Huds. Var. 2. With. Leaves broad, covered with a short, scarcely evident down. RAY syn. 168. 2. Pet. 13. 9.

— 3. γ. Huds. V. 3. With. Leaves longer, with fewer teeth, stem 1-flowered. RAY syn. 170. 14. Pluk. 37. 3.

— 4. Leaves broad, lanceolate, somewhat petioled. ST. Pet. 13. 8. See With. iii. P. 685.

Stem 3 feet prenan'tho- 7. H. Stem erect, panicle terminating, leaves lanceolate, embracing the stem, glaucous underneath. WITH. H. spicatum. Allion. Dicks. Lin. Tr.

— Woods, Scotl. Dicks. P. 6. 7. Allion. 27. 1. 3.

Stem 3 feet paludo'sum. 8. H. Stem panicled, leaves embracing the stem, toothed, smooth, calyxes hispid.

Flowers yellow
Marsh Hawkw. Moist woods, &c. B. 7. Ger. 300.
[Stems intensely bitter]

Stem perennated
muro'rum. 9. H. Stem branched, root-leaves ovate, toothed, stem-leaf smaller. — *leaves below entire*

Flowers yellow
Wall Hawkweed. Old walls, &c. P. 7. Ger. 304. 1.

sylvat'i- 10. H. Stem branched, leafy, root-leaves ovate, (lanceolate, denticulate), acute, petioled, stem-leaves sessile, pedunc. many-flowered. GOUAN. WITH.

cum. H. murorum β. Lin. Huds.

— On Dudley Castle Hill. P. 8. Ger. 304. 2.

Stem 3 feet Kall'mii. 11. H. Stem erect, many-flowered, leaves lanceolate, toothed, peduncles tomentous.

Corolla yellow, seeds smooth
— Scotland. G. DONN.

villo'sum? 11. H. Stem branched, leafy, leaves hirsute, root-leaves lanceolato-ovate, toothed, stem-leaves embracing, cordate.

Flowers lemon colour
— On Ben Nevis. Dicks. P. 8. Jacq. Aus. 87.

Stem 13 inches, molle. 12. H. Leaves lanceolate, very entire, soft, the lower ones petioled, flow. on somewhat corymbose peduncles. — leaves hairy —

SYNGENESIA. POLYG. ÆQUALIS. Hieracium. 177

- S. of Scotl. DICKS. B. 7. 8. 7. *Aus.* 119.
13. H. Leaves linear, somewhat toothed, scattered, flowers somewhat umbellate. (Floral-leaves under the spurious umbel 4, unequal, central flow. larger. PERS.) *umbella' - Stem 3 feet high leaves green on both sides, rough. Flowers golden yellow*
- Bushy Hawkw. Hedges, &c. P. 7. 8. Curt.*
- Var. 2. *gramineum.* 7. Huds. Var. 2. With. Leaves perfectly entire, smooth, dark green.
- DILL. in Ray syn. 168. 5.
- About London. 7. 8. Pet. 13. 12.
908. SON'CHUS. Recept. naked. Cal. imbricated, ventricose. Papp. hairy. *scales many unequal in two or 3 series. Stem pubescent milky. canadensis. Root fleshy. Stem 3 feet high. Flowers red. Gathered many flowers.*
1. S. Peduncles hispid (bristly), leaves runcinate, flow. racemous. S. *alpinus.* Huds. *arven'sis.*
- Blue Sow-thistle. Mount. past. A. — F. Dan, 182.*
2. S. Pedunc. & cal. hispid, somewhat umbellate, leaves runcinate, cordate at the base. *Root creeping, milky, Stem 4 feet high. Flowers yellow.*
- Corn Sow-thistle. Cornfields. P. 8. Curt. 265.*
3. S. Pedunc. and cal. hispid, somewhat umbellate, leaves runcinate, awned at the base. *palustris. Stem 6 feet high. Calyx black.*
- Marsh Sow-thistle. Watery pl. P. 7. 8. Curt. 298.*
4. S. Pedunc. tomentous, calyxes smooth. *oleraceus.*
- Var. 1. *lavis a.* Lin. Huds. V. 1. With. Leaves embracing the stem, toothed, entire, or pinatifid. HALLER. *Root periform. Peduncles woolly, white. Herb much sought after by Hares and rabbits; gathered for same ones; used by some as a pot-herb and for salads.*
- 2. β . Lin. Huds. 2. With. Smooth, smaller, (leaves) with fewer segments. RAY syn. 163. 2. F. Dan. 682. Ger. 292. 4.
- 3. 7. Huds. Smooth, lacerated. Pet. 14. 10.
- 4. *asper.* 7. Lin. δ . Huds. 3 With. Leaves prickly, laciniated. See Ray syn. 163. 3. *Prickly Sow-th. Road sides. 5. 6. F. Dan. 843.*
- 5. δ . Lin. 7. Huds. 4. With. Leaves prickly, entire. See Ray syn. 163. 4. Ger. 291. 2.
- 6. ζ . Huds. 5. With. Leaf roundish, margin slightly thorny. DILL. in Ray syn. — Leaves obovate, attenuated below into petioles. WITH. Pluk. 61. 5.
- 7. 7. Huds. 6. With. Leaves narrow, oblong, very thorny on the margin. DILL. in R. 163. 6. Leaves linear-oblong, rounded at the end. WITH. Pluk. 62. 4.

Lappula communis - Eaten at Constantinople just before flowering
as a salad; and used in Persia to cure ulcerated hearts -

178 SYNGENESIA. POLYG. ÆQUALIS. *Sonchus*.

Var. 8. 7. With. Stemless, leaves spread on the ground, deeply pinnatifid, segm. sharply toothed.
— Portland Island. WITH. — 5. —

Scales 8 in a single row
Climacanthus bald
Stem bald

919. LAP'SANA. Recept. naked. Cal. calyced, all the inner scales channelled.

Root leaves lyrate - Stem leaves
lyrate - floral leaf linear-lance
rosette at the base of each
beduncle

communis. 1. L. Cal. when in fruit angular, pedunc. slender, very much branched.

Var. 2. *crispa*. Lower leaves lyrate, curled. PERS. Com. Nipplewort. Hedges. A. 6. 7. Curt.

916. HYOS'ERIS. Recept. naked. Cal. nearly equal. Papp. hairy and calyced (or imperceptible).

Calyx frimbrose minima
and connivent into a globe
scales many equal, single rowed
polyanthes bald with hollow dots

1. H. Stem divided, naked, peduncles thicker above. Root prostratus - leaves toothed
Small Swine's Succory. Cornfi. A. 5. 6. E. Bot. 95.

929. CARLI'NA. Calyx radiate, marginal, scales (nearest the corols) long, coloured.

Receptacle concave
chaffy, chaffs latero-membran-
beaded, above bristle like many set

vulgaris. 1. C. Stem many-flowered, corymbose, flow. terminating, ray of the calyx white. Corolla purple
Wild Carline Thistle. Dry past. B. 6. Ger. 1159. 1.

923. ARC'TIUM. Cal. globular, scales with inflected hooks at the point.

Lappa
Calyx when full
green during, else on
coherently - stem red
leaves not cut corolla purple
Involucre brownish purple

1. A. Leaves cordate, unarmed, petioled. Burdock. Road sides. B. 7. 8. Curt. 238.

Var. 2. β . Lin. sp. 7. Huds. 2. With. Heads roundish, rather large, brownish purple, covered with a whitish tomentum, stem dark red. RAY syn. 197. 4. Pet. 23. 5.

— 3. β . Huds. 2. With. Heads smooth, very large, an inch in diam., green, cor. purplish. RAY syn. 196. 1.

— 4. δ . Huds. 4. With. Heads of the size of a hazel nut, smooth, broadish at the base, gradually narrower above, brown, cor. purple. DILL. in R. 197. 3. Pet. 23. 3.

— 5. ϵ . Huds. 5. With. Heads of the colour and size of var. 4, but rounder, and covered with a cobweb-like tomentum. DILL. in R. 197. 5. Pet. 23. 4.

— 6. ζ . Huds. Heads small, elegantly reticulated. DILL. in R. 197. 6. Pet. 23. 4.

— 7. 6. With. Heads leafy. DILL. in Ray 197. 2. Pet. 23. 2.

Carduus marianus - Thistle with white - Root eaten early in Spring, also the young stems being boiled and soaked in water to extract the bitterness and the scales of the superior catenation.

SYNGENESIA. POLYG. EQUALIS. *Carduus*. 179

925. CAR'DUUS. Cal. ovate (ventricose) imbricated, scales thorny. Recept. hairy.
Self-perfeathered like

1. Leaves decurrent.

1. C. Leaves toothed, thorny at the margin, flow. *palustris*. Scales erect, lance-racemous, erect, pedunc. unarmed. *solatus*, *alpinus* - Root branched. Marsh Thistle. Marshy mead. P. 7. Pet. 21. 4. Stem stiff. Corolla purple or white.
2. C. Leaves sinuated, thorny at the margin, calyxes peduncled, solitary, erect, villous. C. des. *corolla simple crispus*. Huds. *Wetted Thistle*. Rubbish, &c. A. 6—9. Curt.
3. C. Leaves pinnatifid, thorny at the margin, branches straight, flowers crowded, sessile, calyxes almost cylindrical, scales erect, but open, pungent. CURT. WITH. C. *acanthoides*. Huds. *tenuiflorus*. Stem 4 feet. Slightly branched. Corolla pale purple.
4. C. Leaves pinnatifid, hispid, segm. diverging, cal. ovate, thorny, villous, stem hairy. *lanceolatus*. The calyx erect. *Sphear Thistle*. Rubbish, &c. B. 7. 8. E. Bot. 107. *downy down* *shabby* *leaves villous below*
5. C. Leaves semi-decurrent, thorny, flow. cernuous, calyx-scales spreading upwards. *cernuiflorus*. Root perispermous. Stem 2 feet. Leaves from a root like Musk Thistle. Calc. past. A. 6. 7. F. Dan. 675. *like musk*

2. Leaves sessile.

6. C. Leaves embracing the stem, hastato-pinnatifid, thorny, cal. leafless, thorns channelled, doubly thorny. *marianus*. Stem 5 feet. Leaves dark green with broad white margins, very veins. *Milk Thistle*. Road sides, &c. A. 8. Curt. 148.
7. C. Leaves sessile, pinnatifid, segm. 2-rowed, *eriphorus*. Calyxes the alternate ones erect, calyx globular, villous. Scales obtuse, pink & coloured above coral purple, root perispermous. *Woolly-headed Th*. Meadows. B. 7. E. Bot. 386.
8. C. Leaves sessile, half-embracing the stem, lanceolate, slightly toothed, ciliate, with unequal thorns, stem mostly 1-flowered. Huds. WITH. *pratensis*. (Stem tomentous, 2-leaved.) *Meadow Th*. Mead. P. 5. 6. Ger. 1183. 1. E. B. 177.
9. C. Leaves embracing the stem, lanceolate, toothed, ciliate with small unequal thorns, stem unarmed. (Leaves whitish underneath, none lacinated.) *helenioides*. *Melancholy Th*. M. past. P. 6. 7. Ger. 1183. 2. Var. 2. *heterophyllus*, B. Huds. 2. With. Leaves

Comparison with Acanthium - Down of the stem and leaves used to strip
 clothing, and mix with feathers - Young shoots eaten as pot-herb
 seeds bitter, much used after by small birds.

180 SYNGENESIA. POLYG. EQUALIS. *Carduus*.

embracing the stem, lanceolate, ciliate, (upper)
 entire, and (lower) laciniated, stem about 1-
 flowered, calyx unarmed.

Obs. This is made a distinct species by Lin., but Huds. has
 found it growing from the same root with *C. helenioides*.

- leaves lanceolate* *acanth'is*. 10. *C. Stemless*, calyx smooth.
closely imbricated - i.e. very young
leaves deeply fringed, pale
corolla purple - Root woody
 Dwarf Thistle. Mount. past. P. 7. *E. Bot.* 161.
 Var. 2. *caulescens*. β . Pers. Stem villous, stem-
 leaves scattered, 1 smaller. *Willden.* 6. 11.
927. *ONOPOR'DON*. Recept. like a honeycomb.
Cal. scales mucronate.
- * Acanth'ium*. 1. *O. Calyxes squarrose*, scales (subulate) spreading,
Root fusiform, plant white leaves ovato-oblong, sinuated. (Stem with
woolly stem 3 feet corolla purple straight wings, running up the calyx.)
leaves decurrent woolly on *Woolly Onopordum*. Rubbish, &c. B. 7. *Curt.* 334.
both sides
924. *SERRAT'ULA*. *Cal. almost cylindrical*, im-
 bricated, awnless.
- irregular even* *vinet'ria*. 1. *S. Leaves lyrato-pinnatifid*, terminating segment
largest, florets all of the same form.
large calyx chaffy *Com. Saw-wort*. Woods, &c. P. 7. *E. Bot.* 38.
chaffs brittle-like *Var. 2. 3. With.* All the leaves entire. *Wood*
as per hair-like *Ger.* 713. 1.
corolla purple — 3. 4. *With.* Lower leaves entire, the up-
black thready stem upright per part cut. *HALL.* *Gerard* 576. 2.
 [Plant dry, yellow] — 4. 5. *With.* All the leaves laciniated. *HALL.*
 pinnatifid, segments lanceolate, serrated, with-
 out the large terminating one. *WITH.* *Zanon.* 94.
- Receptacle chaffy* *alpina*. 2. *S. Calyxes somewhat hirsute*, ovate, leaves un-
chaffs lanceolate divided. *leaves bald*.
coloured yellow - plant *Mount Saw-wort*. High mount. P. 8. 9. *Lightf.* 19.
very woolly - Antheranthus Var. 2. *cynoglossifolia*. β . Lin. 2. *With.* Leaves
 lanceolate, narrow. *HALL.* *RAY syn.* 193. 3.—
 — *Snowdon, &c.* *F. Dan.* 37.
 — 3. β . *Huds.* Leaf narrow, denticulate. *RAY*
syn. 193. 4. —
 — Near Llanberys, Caernarv. —
- leaves rather* *arven'sis*. 3. *S. Leaves toothed*, thorny. The habit of a *Car-*
woolly below. Root creeping *duus*.
stem woody - scales woolly *Corn Saw-wort*. Road sides, &c. P. 7. *F. Dan.* 644.
on the edge. Corolla purple Var. 2. Leaves smoother, scarcely thorny, not
 sinuated, nor so deeply divided. *RAY syn.* 194.
 6. *Gerard* 1011. 5.
935. *EUPATO'RIMUM*. Recept. naked. Pappus
 feathery. *Cal.* imbricated, oblong. *Style*
 cloven half-way down, long.

SYNGENESIA. POLYG. ÆQUALIS. Eupatorium 181

1. E. Calyces 5-flowered, leaves digitate. *Pharbitis* cannabi? - Stem 3' tall
Hemp Agrimony. Banks of riv. P. 7. 8. E. B. 428. num. *Stem 3' tall*
Herb. *Stem 3' tall* and *herbaceous*; in small doses *alterative*; root *diminutive*]
942. SANTOLINA. Recept. chaffy. Papp. o.
Cal. imbricated, hemispherical.
1. S. Flow. corymbose, leaves oblong, obtuse, *maritima*.
crenate, very tomentous. E. BOT. HUDS.
WITH. *Athanasia maritima*. Lin.
Sea Cotton-weed. Sea shore. P. 8. 9. E. Bot. 141.
Obs. It is properly referred to Santolina, as the seeds are
destitute of a pappus.
943. ATHANASIA. Recept. chaffy. Pappus 5-awned all tubular
chaffy, very short. Cal. imbricated. 5-awned, compressed below
1. A. Pedunc. 2-flowered, leaves lanceolate, cre- *maritima*. Stem toment.
nate, obtuse, tomentous. (Seeds 2-edged, white. Corolla golden
destitute of a pappus. A species of Santolina? Root branched
na? An intermediate plant between Ath. - stem decumbent
and Sant. See Santolina maritima.
932. BIDENTIS. Recept. chaffy. Papp. with
rough straight awns. Cal. imbricated. cal. coloured
Cor. more rarely furnished with 1 or 2
radiate florets.
1. B. Leaves lanceolate, embracing the stem, flow. *cernua*.
cernuous, seeds erect. Root branched, stem rough bracte
Nodding Double-tooth. Wet ditches. A. 7. 8. Curt.
Var. 2. With radiate florets. RAY syn. 187. 2.
Frequently on the same plant with var. 1.
WOODW. F. Dan. 841.
— 3. Very small. DILL. in Ray syn. 188. 3.
Tab. 7. F. Dan. 312. left-hand fig.
2. B. Leaves 3-cleft, calyxes somewhat leafy, *tripartita*.
seeds erect. Root perisperm. Flowers deep cloth yellow
Trifid Double-tooth. Watery pl. A. 7. 8. Curt. 237.
Var. 2. *pumila*. Stem very simple (or some-
what branched), 1-flowered, bractes several,
leaves (simple) serrated, root simple. ROTH.
Mistaken for B. *minima*. Persoon. — F. Dan.
312. right-hand fig.
- Obs. Linnæus (Sp. pl. P. 1165.) refers to B. *tripartita*
B. *minima*. Huds. as his *minima*; and Withering consi-
ders the dwarf var. of B. *cernua* as the *minima* Lin.; but
as it appears rather doubtful whether either of these var.
be the true B. *minima* of Linnæus, it is entered here as a
distinct species.
3. B. Leaves lanceolate, sessile, flowers and seeds *minima*.
erect. (Root creeping, filiform, jointed, leaves
generally ciliate, obtuse, here and there some-

Helminia in vulgare. *Helminia* in decoction cause the
 agree; leaves in powder 3. four times a day, used in hy-
 after a spasmodic & other had been tried in vain

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SYNGENESIA. POLYG. SUPERFLUA. Conyza. 183

- Flor. of the centre hemispheroid & cut-jointed shape of the rays 3. Cut-*
1. C. Leaves lanceolate, acute, stem herbaceous, squarrosa, leaves hairy corymbose, calyxes squarrose. *Leaves scented, bitter & resinous*
Great Flea-bane. Mount. past. B. 7. 8. Ger. 792. *Grasses yellow*
 946. GNAPHA'LIUM. Recept. naked. Pappus feathery. Cal. imbricated, marginal scales rounded, scarious, coloured.
 1. Herbaceous, Chrysocoma (calyxes yellow).
 1. G. Leaves half-embracing the stem, ensiform, luteo-al'- repand, obtuse, pubescent on both sides, flow. bum. *Stem herbaceous*
conglomerate. *upright, diffuse at bottom*
Jersey Cudweed. Dry banks. A. 7. 8. Ger. 643. 13.
 2. Herbaceous, Argyrocoma (calyxes white).
 2. G. Leaves lineari-lanceolate, acuminate, alter-margarita'- *Flowers*
nate, stem branched above, corymbs fastigate. *ceum. unisexual*
(Leaves soft, erect, reflected at the margin. *description same as above*
Flow. whitish, the disk yellow. PERS.) *stem woolly* *Gray*
American Cudweed. Meadows. P. 8. Ger. 641. 8.
 3. G. Runners procumbent, stem very simple, dioic'cum. *Flowers*
corymb simple, flow. divided (dioicous). *unisexual - male*
Mount. Cat's-foot. Mount. past. P. 5. 6. E. Bot. 267. *anthers 2 twisted at the*
base - female small thread-like, fruit small (Gray)
 3. Filaginoidea (resembling the Filagos).
 4. G. Stem herbaceous, undivided, erect, (leaves *sylvatic* *stem tomentous*
lanceolate, attenuated at the base) scattered *cum. filic*
(in a crowded terminating leafy spike). *spiked calyx black*
Mount. Cudw. Highl. Mount. P. 8. F. Dan. 524. *Root fibrous*
 5. G. Stem erect, terminating in a leafy compound *rectum.*
spike, leaves lineari-lanceolate, almost naked *Root woody - stem 2 feet*
on the upper side. E. Bot. WITH. G. syl- *calyx flesh brown*
vaticum. Huds. *panicle stiff comp & leafy.*
Upright Cudweed. Sandy past. P. 8. E. Bot. 124.
 6. G. Stem herbaceous, simple, procumbent, flow- *supi'num.* *leaves slender*
ers scattered. G. alpinum. Lightf. *Root creeping - stem 6 inches*
Dwarf Cudw. Mount. past. P. 7. 8. Lightf. 20. 2.
 7. G. Stem herbaceous, branched, diffuse, flow. *uligino'* *leaves linear*
crowded, terminating. *stem & leaves woolly* *sum. lanceolate*
Marsh Cudweed. Watery pl. A. 8. F. Dan. 852. *calyx brown-yellow.*
 8. G. Stem dichotomous, erect, herbaceous, flow. *gal'licum.*
subulate, axillary, leaves filiform. HUDS.
WITH.
Corn Cudw. Gravelly cornf. A. 7. 8. Pet. 18. 12.
 9. G. Stem somewhat dichotomous, herbaceous, monta'num.
erect, flow. conical, axillary and terminating.
HUDS. WITH.
Least Cudweed. Sandy past. P. 7. 8. Pet. 18. 11.

Matricaria parthenium - (Plant rather aromatic and yellow)
 an essential oil by distillation
Matricaria Chamomilla - May be used for con. and hemorrh
 with which it is confounded by the old author - An infusion is use
 in Phthisis
 184 SYNGENESIA. POLYG. SUPERFLUA. Gnaphalium.

arven'se? 10. G. Stem paniced, flow. conical, lateral. See
 With.
 german'i- 11. G. Panicle dichotomous, flow. rounded, axillary,
 cum. hirsute, leaves acute.
 Com. Cudw. Road sides, &c. A. 7. 8. F. Dan. 997.
 Obs. Gnaphalium gallicum, montanum, arvense and germanicum
 are ranked as species of Filago by Lin. See Filago.

Flowers of certain leaves 962. BEL' LIS. Recept. naked, conical. Papp. o.
 figure a shape, & out of the Cal. hemispherical, scales equal. Seeds
 very female many of a deep red obovate.

Leaves round peren'nis. 1. B. Scape naked.
 in water flowers pale Com. Daisy. Pastures, &c. P. 3—9. Curtis.

967. MATRICA'RIA. Recept. naked. Papp. o.
 Cal. hemispherical, imbricated, scales solid
 at the margin (not scariose), rather acute.

Leaves woolly Parthe'ni- 1. M. Leaves compound, flat, leaflets ovate, incised,
 Root peren' um. pedunc. branched.

Com. Feverfew. Hedges, &c. P. 6. 7. Ger. 652. 1.
 marit'ima. 2. M. Recept. hemispherical, leaves bipinnate, some-
 what fleshy, convex above, keeled underneath.
 M. inodora y. Huds.

Stalks of Chamo- 3. M. Recept. conical, rays spreading, calyx-scales
 Calyx white mill'la. equal (membranous) at the margin. (Leaves
 leaves dark green, bald many-cleft, capillary, seeds striated.)

Chamomile Feverfew. Road sides. A. 5—8. Curt. 331.
 Var. 2. suaveolens β. Huds. 2. With. M. suaveo-
 lens Lin. Receptacle conical, rays deflected,
 calyx-scales equal at the margin. Gerard 15. 1.
 Sweet-scented Feverf. Road sides. A. 5—8. Ger. 15. 1.

Flowers of the leaves 966. CHRYSAN'THEMUM. Recept. naked. Papp.
 leaves yellow, of the rays marginate. Cal. hemispherical, imbricated,
 female of a deep red color scales membranous at the margin.

Young leaves eaten in salad 1. Leucanthema. (Florets of the ray white.)

But leaves eaten in salad 1. C. Leaves embracing the stem, oblong, serrated
 leaves dark emum. upwards, toothed below.

inodo'rum. 2. C. Leaves pinnate, many-cleft, stem branched,
 Past periform leaves diffuse. (Florets of the ray bent back.) Matri-
 grate scales of calyx caria inodora. Huds.

blackish on the edge Chamomile Golden. Cornfields. A. 7—9. F. D. 696.
 Obs. It is distinguished from Anthemis Cotula and arvensis by
 its naked recept.; and from Matricaria Chamomilla by its
 flattish calyx, its scales, which are brown and uneven at the
 edge, and its hemispherical receptacle. See With.

Bellis - roots, being it boiled in milk to stop the growth
 of the hair - also externally in scrofula. Leaves slightly acid

Andra. Hel' nium - *Chrysanthemum* in *repens* has been used for the same purpose; causes the stomach to reject its contents; yields a resinous substance. Smell, resembling starch and gum -

SYNGENESIA. POLYG. SUPERFL. Chrysanthemum. 185.

2. *Chrysanthema*. (All the Florets yellow.) - *per hie of the corolla*
prodesti yellow of the ray female, a diff. color

3. C. Leaves embracing the stem, lacinated up-wards, dentato-serrated below. *seg'etum. Root fine fern*

Corn Marigold. Cornfl. A. 6—10. F. Dan. 995. *Flowers used to dye yellow*

Var. 2. β . Huds. Leaf glaucous, many-cleft, flower smaller. RAY syn. 183. 2.

— 3. γ . Huds. Leaf glaucous, neither incis- ed, nor serrated. See DILL. in R. 183. 3.

959. DORO'NICUM. Recept. naked. Papp. simple. Calyx-scales in 2 rows, equal, longer than the disk. Seeds of the ray naked, without a pappus. *Flowers all fertile of the center hermaphrodite of the ray female*

1. D. Leaves cordate, obtuse, slightly toothed, root-leaves petioled, stem-leaves embracing. *Pardali- in our Linnæan an'ches. Root to 10 inches*

Leopard's-bane. Near Harrowg. P. 5. 6. Ger. 762. *creeping calyx-scales*

956. IN'ULA. Recept. naked. Papp. simple. Anthers ending in 2 bristles at the base. *the fls. are of the center - Corolla*

1. I. Leaves embracing the stem, ovate, wrinkled, tomentous underneath, calyx-scales ovate. *Hel'e'nium. Flower head very large - Root thick, fleshy, stem upright 3 feet*

Elecampane. Moist mead. P. 7. 8. Woodv. 108. *ca. Receptacle honey-suckle*

2. I. Leaves embracing the stem, cordato-oblong, stem villous, paniced, calyx-scales setaceous. *dysenter'i- leaves hairy*

Flea-bane. Moist pastures. P. 8—10. Curt. 164. *ca. Receptacle honey-suckle*

3. I. Upper leaves embracing the stem (undul- ed), lineari-lanceolate, obtuse, stem erect, calyxes cylindrical. WITH. I. uliginosa Sibth. *cylin'drica. Root fine fern*

I. Pulicaria Huds. not Lin. *Receptacle honey-combed*

Less Flea-bane. Road sides. — 8. 9. Curt. 156. *calyxes fringed - flower-head*

4. I. Leaves linear, fleshy, (generally) 3-pointed. *I. Pulicaria Huds. not Lin. radiata. Root & calyx downy*

Golden Elecamp. Salt marshes. P. 8. E. Bot. 68. *crithmifo- Root creeping*

951. ERIG'ERON. Recept. naked. Pap. hairy. *lia. Flower heads in the*

Cal. of the ray linear, very narrow. *uncanal, becoming deflexed*

1. E. Flowers paniced, rough-haired, leaves lan- ceolate, ciliate. *canaden'se. Flowers of white*

Canada Flea-bane. Rubbish. A. 8—10. Pet. 16. 12. *but star has more yellow at the rays, more in a single row*

2. E. Stem about 2-flowered, calyx rather hirsute, leaves obtuse, villous underneath. *alpi'num. Fls. of ray shorter*

Alpine Flea-bane. Ben Lawers. P. 7. E. Bot. 464. *Pappus reddish - color length three of the center yellow*

3. E. Peduncles alternate, 1 (to 3)-flowered. *a'cre. Scales of Calyx awl-like*

Blue Erigeron. Dry pastures, &c. B. 7—9. Curt. *Fls. of center tubular 5-lab*

955. SOLIDA'GO. Recept. naked. Papp. simple. Cor. of the ray about 5. Cal. scales *Fls. of the ray upright*

imbricated, close. *long lanceolate*

ends of the center fringed sharp

hermaphrodite of the ray yellow, female

Erigeron Canadensis - At present have been made into excellent paper
Linnaeus says it has overrun and laid waste all the plains of Europe and he imagines the seeds were first brought from America by the winds -

Solidago Virga-auria - Formerly in great esteem as an antiseptic
 and the herb, indeed, was imported from Italy 26 years ago
 but when found to be a native of Lancaster health it fell into disrepute
 in which change in its value scarcely is very pleasant -
 186 SYNGENESIA. POLYG. SUPERFLUA. *Solidago*.

- Stem downy* *Vir'ga-aur'*-1. S. Stem rather flexuose (branched), angular, racemes paniced, erect, crowded.
upper leaves *rea.* Var. 1. Stem branched, leaves strongly serrated.
lanceolate narrow at both WITH. E. Bot. 301.
ends; lower elliptical, hairy — 2. Stem branched, leaves indistinctly serrated.
racemes upright crowded WITH. Ger. 430. 1.
radical leaves petiolated Golden Rod. Hedges, &c. P. 8. 9. —
 — 3. Stem serpentine, unbranched. See With.
cam'brica. 2. S. Leaves lanceolate, somewhat serrated, rather
 hoary, panicles corymbose, terminal (pedunc.
 sometimes 1-flowered). HUDS. (Stem straight,
 unbranched. See With.)
 Welch Golden Rod. Mountains. P. 7. Pet. 16. 11.
Lappon'i- 3. S. Stem straight, unbranched, root-leaves ovate,
ca. on bordered petioles, stem-leaves lanceolate,
 sessile, flow. in a spike-like terminating raceme,
 and in the bosom of the upper leaves. WITH.
 — Found in Scotland, &c. —

- Calyx cylind. hemispher.* 957. CINERA'RIA. Recept. naked. Papp. sim-
fl. centre horn of the rays ple. Cal. simple, many-leaved, equal.
root filices *palus'tris.* 1. C. Flow. corymbose, leaves broad-lanceolate, den-
stem 3 feet tato-serrated, stem villous.
leaves p. h. hairy Marsh Flea-wort. Marshes. P. 6. 7. E. Bot. 151.
root filices *integrifo-* 2. C. Flow. in a simple involucred umbel, stem-
stem not branched lia. leaves nearly linear, root-leaves oblongo-ovate,
leaves turned back on the edges or spatulate, woolly, indistinctly toothed. E.
leaves silky BOT. WITH. C. *integrifolia* β. *pratensis* Mur-
 ray. C. Alpina HUDS. 7. Lin. Sp. Pl.
 Mount. Flea-wort. Hilly past. P. 5. 6. E. Bot. 152.
 953. SENE'CIO. Recept. naked. Papp. simple.
 Cal. cylindrical, calyced, scales sphacelat-
 ed at the point.

1. Flowers flosculous (viscosus).
Fracted lanceolat *vulga'ris.* 1. S. Corols naked, leaves pinnato-sinuated, embrac-
short, pressed close ing the stem, flow. scattered.
calyx bald Groundsel. Rubbish. A. 4—9. Curt.
 2. Flowers radiate, the ray revolute.

- Stem much branched* *visco'sus.* 2. S. Corols revolute, leaves pinnatifid, viscid, ca-
fracted lyx-scales loose, as large as the (hairy) perianth.
as the calyx Stinking Groundsel. Sandy gr. A. 8—10. E. Bot. 32.
fl. gold yellow 3. S. Corols revolute, leaves pinnatifid, toothed,
scales of calyx stem corymbose, erect. S. viscosus β. HUDS.
bright, downy yellow flower Bushy Groundsel. Ditch-banks. A. 7. Ger. 278. 2.
fracted very short pressed close

Senecio Vulg. aus - Groundsel - Juice or a strong infusion of it is emul-
 sion and vermifuge, useful to expel bots from horses - mixed leaves & go-
 ad application to tails - flowers when quite ripe given to small birds

Senecio. Jacobaea - Herb. fringed, recumbent, rooted in clusters -
 Leaves: dark wool deep green, and all over wool yellow -
Tussilago Petasites - Root sessile, not bitter, acid and strong smelling
 The leaves afford shelter to small animals

SYNGENESIA. POLYG. SUPERFLUA. Senecio. 187

3. Flowers radiate, ray spreading, leaves pinnatifid.
4. S. Corols radiate, all the leaves pinnate, leaflets *ten'uifo'li* - Leaves below linear, pedunc. corymbose, stem erect (tomentous; lower leaves on long petioles). *us. pale pubescent, shining*
Calyx hemispherical, downy
Hoary Groundsel. Hedges. P. 8. Jacq. Aust. 178.
 Var. 2. Plant but little tomentous, lower leaves sessile, segments broader. WITH. *S. erucifolius*. Huds. Curt., not Lin. *Arz. Curt. 294.*
Obs. The following char. of *S. erucifolius* is given by Lin. "Cor. radiant, leaves pinnatifid, toothed, somewhat rough-haired, stem erect." (By cultivation becoming smooth. - Leaves villous underneath, pinnatifid, segm. linear, reflected at the margin, incised, the outermost 3-cleft, stem tall, villous. Pers.)
5. S. Cor. radiate, leaves pinnato-lyrate, segments finely lacinated, stem erect. *Jacobaea'a. Calyx yellow. Scape short. Leaves blackish green.*
Ragwort. Road sides, &c. P. 7. F. Dan. 944.
 Var. 2. β . Lin. Flowers without rays. SHER. in Ray. 177. 1.
 3. Flowers without rays, whole plant hoary, with a dense tomentous substance. WITH.
6. S. Corols radiate, leaves toothed, root-leaves *aquat'icus. Scales of calyx ovate, stem-leaves pinnatifid, the outermost more or less lactescent, segment larger. Huds. - Stem upright, branched, leaves light green*
Water Groundsel. Watery pl. P. 7. 8. Pet. 17. 2.
4. Fl. radiate, ray spreading, leaves undivided.
7. S. Cor. radiate, leaves ensiform, acutely serrated, rather villous underneath, stem stiff and straight. *woolly, simple 5 feet high. Root creeping*
Bird's-tongue. Marshy ditches. P. 8. Ger. 483. 6.
8. S. Cor. radiate, flow. corymbose, leaves lanceolate, serrated, smoothish. *saracen'cus. Stem up to 3 feet. Powerful acting!*
Broad-leaved Gr. Ditch-banks. P. 7. 8. J. Aus. 186. Calyx woolly-branched, lanceolate
952. TUSSILA'GO. Recept. naked. Papp. simple. Cal. scales equal, as long as the disk, somewhat membranous. *on one leaf*
1. T. Scape 1-flowered, imbricated, leaves somewhat cordate, angular, finely toothed. *Farfara. Calyx cordate. bell-shaped and bent back*
Com. Colt's-foot. Moist places. P. 3. 4. Curt. of the rays female
2. T. Thyrsus ovate, fem. florets naked, few. (2, Petasites. *Calyx cordate, simple & bell-shaped*
 or 3, scarcely petaloid, amongst the hermaph. *in 3 in one axis each*
 - Almost all the flor. hermaph., patulous, pistils projecting, club-shaped. See Pers.)
Butterbur. Banks of rivers. P. 3. 4. Curt. of the rays three in
- Tussilago Farfara* - Leaves rustier, bitter, mucilaginous, used in England a strong decoction of the dried leaves used in scrophulous cases dried leaves at basis of cathartic drinks, down on the under surface used as a tincture.

Obs. Dr. Smith has suggested, that this is the male, and *P. hybrida* the fem. plant, forming together only one dioicous species. He has formed this opinion from observing that in the herm. flor. of *T. petasites* the stigmas are thick and barren, the anthers united, and the fem. flor. few, or altogether wanting; whilst in *T. hybrida* the anthers of the herm. flor. (which are very few in number) are separate, or scarcely at all syngenesious, and the fem. florets very numerous. See E. Bot. If this opinion were well founded, we should expect to find *T. hybrida* wherever any considerable number of plants of *T. petasites* occurs, and that *T. petasites* would rarely be productive unless the other were present.

hybrida. 3. *T. Thyrsus* oblong, fem. flor. naked, numerous. (Thyrsus conical, somewhat nodding, fem. flor. very numerous, herm. 2, or 3, central, pistils bifid. PERS.)

Stalked Butter-bur. Banks of riv. P. 3.4. E. Bot. 436.

954. *As' TER*. Recept. naked. Pappus simple. Cor. of the ray more than 10. Cal. imbricated, lower scales patulous.

1. Herbaceous, leaves entire, pedunc. naked.

Calyc. hemisphaer.
Stiles imbricate
unequal, fused close, lobes obt.
Lower Pet. filous

1. A. Leaves (generally) lanceolate, very entire, fleshy, smooth, branches unequal, flow. corymbose, ~~radiated, head large~~

Sea Starwort. Muddy sea coasts. P. 8.9. E. Bot. 87.

Var. 2. All the florets tubular. WITH. RAY syn.

175. 2. Pet. 17. 12.

Plant. of corolla hemisphaer.
of the rays female all petals

970. *AN'THEMIS*. Recept. chaffy. Papp. o. Cal. hemispherical, nearly equal. Florets of the ray more than 5.

1. Ray of a different colour, or white.

Stems much branched arven'sis.
sp. of leaves bipinnate
long. ovate downy - Plant
scutell. Flows
Leaves bipinnate, bald
Plant branches nobilis.
at top, decumbent

1. A. Recept. conical, chaff setaceous, seeds crowned with a margin.

Corn Chamomile. Cornfields. B. 6. 7. Pet. 19. 8.

Var. 2. All the florets ligulate. DILL. in R. 186. 4.

2. A. Recept. conical, chaff setaceous, seeds naked.

Stinking Cham. Road sides, &c. A. 5—8. Curt. 329.

Var. 2. All the florets ligulate. DILL. in R. 185. 3.

3. A. Leaves pinnato-compound, linear, acute, somewhat villous.

Com. Chamomile. Boggy past. P. 8. 9. Woods. 103.

Var. 2. Florets of the ray o. DILL. in R. 185. 2.

Ger. 754. 2.

maritima.

4. A. Leaves pinnate, finely toothed, fleshy, naked, dotted, stem prostrate, calyxes rather tomentous.

Sea Cham. Sea coast. P. 7. 8. J. B. iii. 122. 1.

St. leaves nobilis
and flowers like and imbricate externally - flowers in
injection stomachi antispasmodic - In powder petrifying, cure
on hand has failed

Achillea Ptarmica - Root hot, acid, sialagogue; leaves
in powder emetic; herb chewed, acid; sialagogue,
young tops, a warm spring salad.

SYNGENESIA. POLYG. SUPERFLUA. Anthemis. 189

2. Ray of the same colour, or yellow.

5. A. Leaves bipinnate, serrated, tomentous un- tinctoria.
derneath, stem corymbous. *Flowers yellow a very clear*
Yellow Cham. Sunny mead. P. 7. 8. F. Dan. 741. *and good dye*
971. ACHILLEA. Recept. chaffy. Papp. o. *King of the centaurs*
Cal. ovate, imbricated. Florets of the ray *tubular of the ray*
about 4 (to 10). *female ligulate*
1. A. Leaves lanceolate, acuminate, finely ser- Ptarmica.
rated. *Root creeping - Flowers bedimmed, white*
Sneezewort Yarrow. Moist pl. P. 7. 8. Curt. 343.
Var. 2. Fl. double. RAY syn. 183. 3. Ger. 606. 2.
2. A. Leaves bipinnate, naked, segments linear, Millefo'li-
toothed, stems furrowed upwards. *Leaves hairy um. Flowers round*
Com. Yarrow. Road sides. P. 6—8. F. Dan. 737. *small, white*
Flowers yield an essential oil; infusion of the flowering
her Stimulant - Stomachic

POLYGAMIA FRUSTRANEA.

984. CENTAU'REA. Recept. bristly. Pappus
simple. Cor. of the ray funnel-shaped,
longer, irregular.

1. Cyani, calyx-scales serrato-ciliate.

1. C. Cal. serrated, leaves linear, very entire, the Cya'nus.
lowest toothed. *It now yields a fine water colour Plant-Lovers the*
Blue-bottle. Cornfields. A. 6. 8. E. Bot. 277. *stick of the reaper*
2. C. Cal. scales ovate, ciliate, ciliae capillary, e- ni'gra.
rect, leaves lyrato-angular, (upper leaves near- *Root creeping*
ly entire, ovato-lanceolate) fl. all flosculous. *Stem branched*
Knapweed. Pastures, &c. P. 7. 8. E. Bot. 278.
Var. 2. Flow. radiate. WITH. Common in
Wiltshire.
3. C. Cal. ciliate, leaves pinnatifid, segments lan- Scabio'sa.
ceolate. *globe for* *Stem 2 or 3 feet; leaves dark green*
Greater Knapweed. Cornfields. P. 7. E. Bot. 56.

2. Calcitrapæ, calyx-thorns compound.

4. C. Cal. somewhat doubly thorned, sessile, leaves Calcitra'pa.
pinnatifid, (segm.) linear, toothed, stem hairy.
(Cor. of the ray purple, of the disk whitish.)
Star Thistle. Road sides. A. 7. 8. E. Bot. 125.
5. C. Cal. doubly thorny, solitary, branch-leaves solstitia'lis.
decurent, unarmed, lanceolate, root-leaves *stem branched*
lyrato-pinnatifid. (Flow. yellow.) *golden yellow*
St. Barnaby's Centaury. Hedges. A. 7. 8. E. B. 243.

POLYGAMIA NECESSARIA.

990. CALEN'DULA. Recept. naked. Pappus o.
Cal. many-leaved, equal. Seeds of the disk
membranous.

arven'sis. 1. C. Seeds cymbiform, muricated, incurved, the
outermost erect, stretched out.

— Shore at Falmouth. A. 8—10. Gerard 603.

995. FILA'GO. Recept. naked. Papp. o (or very
short), Cal. imbricated. Fem. Florets a-
mongst the scales of the calyx (partly with-
out petals).

arven'sis. 1. F. Stem panicled, flow. conical, lateral.

german'ica. 2. F. Panic. dichotomous, flow. rounded, axillary,
hirsute, leaves acute. *clashing, woolly both sides*

gal'lica. 3. F. Stem dichotomous, erect, flow. subulate, axil-
lary, leaves filiform. *greyish, twisted leaves*

monta'na. 4. F. Stem rather dichotomous, erect, flow. conical,
terminating, and axillary.

See Gnaphalium arvense, &c. Page 183. & 4.

*leaves lanceolate -
dotted, upright -
bristled along both sides woolly*

MONOGAMIA.

1005. JASIO'NE. Common Calyx 10-leaved. Cor.
5-petalled, regular. Caps. inferior, 2-cell-
ed (many-seeded, crowned by the proper
calyx).

monta'na. 1. JASIONE.

*leaves linear, lance-
olate, wood, with
root-leaves large
Root-woody, stems
erect, round, slightly
branched - flowers blue*

Obs. The economy of the flowers in this genus is very singu-
lar. The florets of the disk have fertile anthers, which are
united with one another only at the base, and club-shaped
barren hirsute pistils; on the contrary the florets of the ray
which are furnished with true emarginate stigmas, proper
for fertilizing the seeds, have barren stamens; hence the
proper stigmas receive the pollen from the club-shaped ones,
upon which it is first received, as they pass through the an-
thers. See Persoon.

Mountain Jasione. Sandy past. A. 6. 7. Curt. 245.

1006. LOBE'LIA. Cal. 5-cleft. Cor. 1-petalled,
irregular, Caps. inferior, 2 or 3 (to 5)
-celled, - stigma bearded

Dortman' - 1. L. Leaves linear, 2-celled, very entire, stem near-
ly naked. *leaves mostly radical*

flowers in racemes Water Gladiole, Lakes in mount, c. P. 7. 8. E. B. 140.

*leaves milky - Root white, stem round hollow - leaves all under
water, bent back - flowers drooping, blue*

2. L. Stem rather erect, lower leaves roundish, u'rens. *Flowers 12*
 crenate, upper lanceolate, serrated, flow. ra- *rounded and*
 cernous. *Plant acrid, especially the root*

Acrid L. Slope of Kilmington Hill. P. 10. Curt.

1007. VI'OLA. Cal. 5-leaved. Cor. 5-petalled,
 irregular, with a spur behind. Caps. su-
 perior, 3-valved, 1-celled.

1. Stemless.

1. V. Leaves cordate, piloso-hispid. (Petioles *hir'ta. Shoots stiff*
 rough with hair, bractes below the middle of *horizontal, lapped*
 the peduncle. CURT. — *bractes awl-shape - Fls. blue scabrous*
 Hairy Violet. Calcareous soil. P. 3. 4. Curt.

2. V. Leaves cordate, stolons creeping. (Bractes *odora'ta.*
 above the middle of the peduncle. CURT.) *Root woody*
 Sweet Violet. Ditch-banks. P. 3. 4. Curt. *Petioles & stipes rather bald*

3. V. Leaves reniform (reniformi-cordate, some- *palus'tris.*
 what convolute). *bold on both faces - Leaves very short -*
 Marsh Violet. Mossy bogs. P. 4. 5. Curt. 217. *not creeping*
Flowers pale blue, var. 2. - Stigma pinkish hairy
 2. Caulescent. (Stipules entire, lutea.)

4. V. Stem, when becoming adult, ascending, *cani'na.* *Stem*
 leaves oblongo-cordate. (Cal. segments acu- *minately 3-sided*
 minate. CURT.) *Petioles, slightly winged - Peduncles 4-sided*
 Dog's Violet. Hedge-banks. P. 4—6. Curt. 108. *Flowers blue or*
 Var. 2. Much smaller, spur yellowish. DILL. *white the seed*
 in Ray 364. 5. tab. 24. 1.

5. V. Stem ascending, leaves ovato-lanceolate. E. *lad'tea.*
 Bot. V. *canina* var. 3. With.
 Cream-col. Violet. Pendarvis. P. 5. E. Bot. 445.

3. Caulescent; Stipules pinnatifid; Stigma
 urceolate.

6. V. Stem 3-sided, diffuse, leaves oblong, incised. *tri'color.*

Var. 1. *arvensis.* & Pers. & Lin. Sp. Huds.—
 Leaves ovato-lanceolate, serrated, calyx rather
 longer than the corol. PERS.—Cor. white,
 or yellow-white, with a few purple streaks.
 WITH. RAY syn. 366. 11.

— Hedge-banks. A. 5—9. Ger. 854. 4.

— 2. Cor. blue, or purplish, sometimes with
 yellow, or white. WITH.

— Road sides, common. Pet. 37. 8.

— 3. & Lin. Huds. 3. With. Cor. of more
 than 2 colours. STOKES.

Pansies. Ditch-banks. A. 5—9. Curt.

- lu'tea.* 7. V. Stem unbranched, erect, 3-cornered, leaves ciliate (with strong hairs, like an eye-lash), lower cordate, upper lanceolate. (Stipules entire, or toothed.) WITH. V. grandiflora. Huds. V. lutea grandiflora. RAY syn. 365. 10. not Lin. Yellow Violet. Mount. past. P. 5—7. Pet. 37. 10.
- amo'na.* 8. V. Stem cylindrical, unbranched, leaves orbiculate-cordate, obtusely crenate, ciliate, veined, shining, stipules somewhat palmate. (Flow. large, purple, upper pet. obtusely ovate.) FORSTER. See Symons. P. 198.

— Scotland. DICKSON: *Flora Scotica*

1008. IMPA'TIENS. Cal. 2-leaved. Cor. 5-petalled, irregular, nectary cowed. Caps. superior, 5-valved. *valves burst, the caly. fls. 3-laterally*

No'li-tan'- 1. I. Pedunc. many-flowered, solitary, leaves ovate, joints of the stem swollen.

leaves oblongly serrated Touch-me-not. Banks of rivulets. A. 7. 8. F. Dan. 582.

Herb juicy, pale Obs. All the plants in this order seem very properly referred by With. to the class Pentandria.

pedunc. bold, much branched - peduncles capillary, 3-4 fl. Flowers yellow dotted with red. — Plant acid.

Parts of Fructification of the Orchidæ.

Gynostemium - Columna - Pistillum antheriferum - A sexual organ formed by the union of those of the two sexes into one columnar mass - Fig 2, 3, 5, 6, 8.

Filament - Gynema - The part that appears to support the male organ.

Stigma - Gynixus - The moist and viscous surface of the female organ. - Figs 2 a; 5 b; 6 c; 8 d.

Rostrillum - an elongation of the stigma above the gynixus often curving it - Fig 6 e.

Endicula - the pedicell or solid filament that carries the pollen masses. Fig 1 b - 4 a.

Pectinaculum - the globular viscous body to which the caudicle is attached, connecting the pollen masses together. Fig 1 a. 4 b.

Cinctum - the cavity in the upper part of the gynostemium above or behind the Gynixus, in which the anthers or pollen may be lodged - Fig 7 2; 5 f.

Locellus - the cavity in which each pollen mass is lodged. Fig 2. 2.

Pollen mass - Anther - Fig 1 c. d - 2 e - 5 f.

Bractea - two pieces of which the pollen masses are composed in some cases. Fig 5.

Septulum - Division between the two locelli. Fig 2 f. 5 g.

Staminodivision - Append^{es} which appear to be abortive anthers. Fig 2 d.

Furrow - The end of the rostrillum forming a hollow for the retractor. Fig 2.

Retractor - a glandular swelling at the top or middle of the rostrillum secreting a viscous humor which enables the Pol. mass. to slide down. Fig 2 a. d.

Fig 1 Orchis - a Retinacle. b Cardicula. c Pollen-maps
 & d Pollen-map cut off transversely, to show the septulum,
 cells and grains, of which it is composed

Fig 2 Orchis - a Gynostemium b Bracteolae c Prostella
 & d Staminiodia or imperfect anthers - e Clinandria filled
 with the Pollen-maps - f Septulum.

CLASS XX.

Fig 3 Cypripedium a Gynostemium
 b supports to anther c Anther
 & d Gynostemium & Hamuliferous

GYNANDRIA.

Fig 4 Lycopodium Loricatum - a Cardicula
 b Pericolla seated on the Prostella

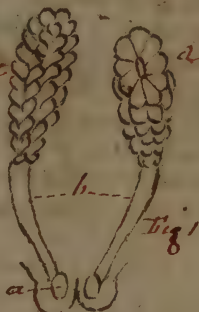
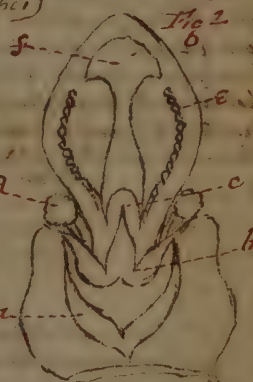


Fig 5 Nigella a Bracteolae b Prostella

DIANDRIA.

- 86 Gynostemium c Bracteolae cut open & d Retinacles
 1009. ORCHIS. Nectary horn-shaped. & Staminiodia
 1010. SATYRIUM. Nectary purse-like (with a
 depressed line in the middle). & Pollen-maps
 1011. OPHRYS. Nectary somewhat keeled.
 1012. SERAPIAS. Nectary ovate, gibbous un-
 derneath.
 1015. CYPRIPEDIUM. Nectary inflated, ven-
 tricose.
 — MALAXIS. Nectary erect, 1-leaved, cor-
 date, hollow, embracing the stam. and
 pist. Cor. reversed. E. BOT. SWARTZ.
 WITH. 3. 115. 611. 115. 115. 115.



HEXANDRIA.

1022. ARISTOLOCHIA. Hexagynous. Cal. o.
 Cor. 1-petalled. Caps. 6-celled.

POLYANDRIA.

1028. ALUM. Spathe 1-leaved. Cal. o. Cor. o.
 Stam. above the Pistils.
 1032. ZOOSTERA. A leaf. Cal. o. Cor. o.
 Seeds alternate, naked. (Caps. alternate.
 Seeds solitary. WITH.)

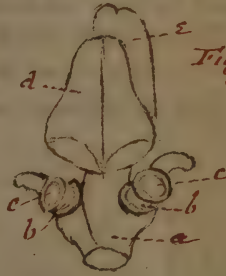


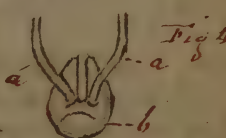
Fig 6 Ophrys Lueslii a lower lip turned down and
 cut off b Gynostemium c Gynostemium & d Wing
 of Gynostemium
 DIANDRIA. e Clinandria
 f Anther i Pollen-maps
 1009. ORCHIS. Nect. horn-shaped, behind
 the flow. (Cor. ringent.)

Fig 7 Ophrys Lueslii - The solid Pollen-map,

Fig 8. Serapias - a Part of ovary b Gynostemium
 c Gynostemium d Prostella e Filament
 f Prostella g Pollen-map h anther i Staminiodium

Fig 9. Serapias - The granular Pollen-maps

Fig 10. Serapias - Pollen-map cut to show the granules & magnified



1. Bulbs undivided.

- ides of the anther
widely dist. bifolia. 1. O. Lip of the nectary lanceolate, very entire, horn
very long, (outer) petals spreading.
bollen in long, twisted
masses - Root 2 tubercles
leaves radical, ovate.
linear 2 or 3 - Flowers
about 12 white fragrant
leaf-green, stem root shape
- leaves 8 inches pyramidal - 2. O. Lip of the nect. 2-horned (at the base), 3-cleft,
leaves not spotted lis.
like pyramidal - bracted
col. flow. purplish white
Root 2 tubercles mas'cula. 3. O. Lip of the nect. (3, or) 4-lobed, crenulate,
leaves 2 or 3 - leaves, bracted
noted with dark, purple
bracted lanceolate, coloured
flowers coloured - Dorsal lip purple
Mo'rio. 4. O. Lip of the nect. 4-cleft, crenulate (at the
Root 2 tubercles 12
leaves - leaves lanceolate
coloured - flowers purple
- leaves 2 or 3 inches ustulata. 5. O. Lip of the nect. 4-cleft, rough with dots, horn
very short leaves 4 or 5 lanceolate
not spotted -
leaves 13 inches militaris. 1. O. Lip of the nect. 5-cleft, rough with dots, horn
flow. large, greenish narrow
with purple or pale ash grey
Root on opposite side
205. 2.
- Meadow Orchis. Moist past. P. 5. 6. Curtis.
- Dwarf Orchis. Dry pastures. P. 5. 6. E. Bot. 18.
- Military Orchis. Chalky soil. P. 5. E. Bot. 16.
- Var. 3. Lip 3-cleft, segm. linear. WITH. Ger.

2. Bulbs palmate.

- latifolia. 8. O. Bulbs somewhat palmate, straight, horn of the
nect. conical, lip 3-lobed, reflected at the sides,
bractes longer than the flowers. (Stem fistulous.)

(Male Orchis - This being the most abundant species the root is made
into soup, by being taken up, when the stalks begin to fall, the new tubers
separated, washed and the outer thin skin taken off, the prepared tubers
are then spread upon a tin plate, and dried for 3 or 50 minutes in a
sufficiently heated, by which they acquire a semitransparency like
dried without much loss of colour or taste - See next chapter

GYNANDRIA. DIANDRIA. Orchis.

495

Male-handed Or. Meadows. P. 5. 6, Curt. 250.

9. O. Bulbs spreading, horn of the nectary shorter *maculata*, *Bulbs minute*
than the germen, lip flat, dorsal-petals erect. *Scape slender 2 feet*
(Stem solid, lip crenate, 3-lobed, middle segm. *leaves lanceolate*
narrower, very entire.)

Spotted Orchis. Woods. P. 6. F. Dan. 933.

Obs. The leaves are frequently found without spots.

10. O. Horn of the nect. setaceous, longer than the conop'sea.
 germ. lip 3-cleft (crenate, segm. equal), a of *Buteo palmatus* leaves
 the pet. wide-spreading.

Red-handed Orchis. Meadows. P. 6. E. Bot. 10.

3. *Bulbs fascicled.* (Roots fibrous. WITH.)

(*Satyrium albidum*.)

11. O. Bulbs filiform, lip of the nect. ovate, very *abortiva*?
entire, stem leafless. See Ray syn. 383.

Bird's-nest Orchis. Mead, P. 5. 6. *Jacq. Aus.* 193.

1010. SATYR' IUM. *Nect.* behind the flow., inflated, with a depressed line in the middle, running through its whole length.

1. S. Bulbs undivided, leaves lanceolate, lip of the nectary 3-cleft, the intermediate segment (very long) linear, oblique, premorse.

Lizard Satyrion. Chalky past. P. 6. 7. *E. Bot.* 34.

2. S. Bulbs palmate, leaves oblong, (erect) obtuse, *vir'ide*.
lip of the nect. linear, 3-cleft, middle segm. *Leaves 12 inches*
indistinct. *Fls. small greenish tint?*


Frog Satyrion. High grav. past. P.6—8. *E.B.*94.

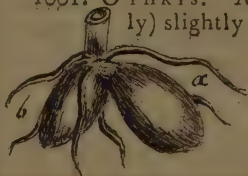
3. S. Bulbs fascicled, leaves lanceolate, lip of the *albidum*. *Herb. 15 in.*
nect. 3-cleft, acute, intermediate segm. obtuse. *Flowers small, white.*

White Satyrion. Mount. past. P. 6.7. F. Dan. 115.

4. S. Bulbs fibrous; (roots fibrous, creeping. E. repens. leaves 5 or 7 Bot.) leaves ovate, radical, flowers 1-rowed.

Creeping Satyrion. Woods. P. 6—8. *E. Bot.* 289.

1001. O'PHRYS. *Nect.* (consisting of a
 ly) slightly keeled underneath.



Root of *Orchis militaris*
a is the tubercle which is to produce the
new stem - b is that which has produced
the old stem -

1. Bulbs branched:

- Stem 18 inches vis. with a alternate sheathing scales coral'lo-* 1. O. Bulbs fibrous, fascicled, stem sheathed, leafless, lip of the nectary bifid. *flow. brownish* Bird's-nest Ophrys. Woods, &c. P. 5. 6. E. Bot. 48.
- stem 9 inches rhi'za. yellow brown scaly* 2. O. Bulbs branched, flexuose, stem sheathed, leafless, lip of the nect. 3-cleft. Coral-rooted Ophrys. Moist woods. P. 8. 9. F. D. 45.
- leaves radiat. spirall'is. oblong with a short petiole stem 6 inches smooth below downy above* 3. O. Bulbs aggregate, oblong, stem somewhat leafy, flowers spiral, one-rowed, lip of the nectary undivided, crenate. *H. small white odorless* Triple Twayblade. Pastures. P. 8—10. Curt.
- stem 12 inches flowers pedicelled, green* 4. O. Bulb fibrous, stem 2-leaved, leaves ovate, lip of the nectary bifid. Common Twayblade. Woods, &c. P. 5. 6. Curt. 177. Var. 2. β . Lin. With 3 leaves.
- stem 6 inches leaves greenish* 5. O. Bulb fibrous, stem 2-leaved, leaves cordate. (Lip bifid, with a tooth on each side at the base.) Least Twaybl. Mount. heaths. P. 6. 7. E. Bot. 358.

2. Bulbs round.

- leaves 2 male Læsellii. lanceolate opposite lip ovate bent back at tip* 6. O. Bulb roundish, scape naked, triangular, lip of the nectary ovate (pet. linear). *O. lilifolia* β . Huds. *scapes 4 inch H. lower* Dwarf Twayblade. Moors. P. 5—7. E. Bot. 47.
- stem 8 inches radical leaves 2 or 3 flowers yellowish green* 7. O. Bulb globular, scape naked, lip of the nectary 3-cleft, cruciform. Yellow Orchis. Barren pastures. P. 7. E. Bot. 71.
- scapes 18 inches, anthrop-like many P. flowers greenish purple* 8. O. Bulbs roundish, scape (stem) leafy, lip of the nect. linear, 3-cleft, middle segment elongated, bifid. Green-man Orchis. Chalky past. P. 6. E. Bot. 29.
- stem 9 inches large yellowish 3 outer lobes green 2 inner purple* 9. O. Bulbs roundish, scape (stem) leafy, lip of the nect. (somewhat convex, downy above) 4-cleft. Huds. Fly Orchis. Calcareous soil. P. 5. 6. E. Bot. 64.
- stem 19 in. leaves broad - bracted large stem gray - 3 outer lobes of calyx illid. 2 inner purple 2 inner lanceolate sharp pointed* 10. O. Bulbs roundish, scape (stem) leafy, lip of the nect. 5-lobed, lobes inflected underneath. Huds. (Lip shorter than the petals. Woodw.) Bee Orchis. Meadows, &c. P. 6. Curtis.
- stem 12 in. flowers green* 11. O. Bulbs roundish, scape (stem) leafy, lip of the nect. roundish, entire, emarginate, convex. Huds. (Lip longer than the petals. Woodw.) Spider Ophrys. Chalky past. P. 4. 5. E. Bot. 65.
- lip brown - bracts green 3 outer oblong, obtuse 2 inner lanceolate, short pointed*

12. O. Bulb roundish, scape nearly naked, 5-cornered, leaves rough at the end, lip of the nect. *paludosa*. *Leaves 4 inches*
entire. See *Malaxis paludosa*. *leaves 3 or 4 spatulate*
flow yellow-green 3 or 4 petals, white

1012. SERRAPIAS. Nectary ovate, gibbous, lip
ovate. (Cor. 6-petalled, spreading.
Caps. inferior, one-celled, 3-valved.
WITH.)

1. S. Bulbs fibrous, (roots creeping,) leaves ovate, *latifolia*.
embracing the stem, flow. rather cernuous *stem 2 feet flower*
(lip pointed, entire, shorter than the petals). *small purple*
Com. Helleborine. Woods. P. 7. 8. E. Bot. 269.
Var. 2. Leaves narrower, closer, flow. later,
dark-coloured. RAY. WITH.

2. S. Bulbs fibrous, leaves ensiform, (lanceolate) *longifolia*. *Bractes longer*
sessile, flow. pendulous (lip crenate, obtuse, *than the ovary - like*
longer than the pet. WITH.). S. *palustris* *pointed with raised wing*
Lightf. E. Bot. S. *latifolia* γ. Huds. *leaves stem 12 in fl purple*
Marsh Helleborine. Watery pl. P. 7. 8. E. Bot. 270.

3. S. Bulbs fibrous, leaves ensiform, 2-rowed, *ensifolia*.
bractes very minute, flow. erect, lip of the *stem 12 inches*
nect. obtuse, (one half) shorter than the pe- *flow white lanceolate*
tals. S. *longifolia* γ. Huds. *bractes as long as the*
flower
Sword-leaved Hell. Woods. P. 8. E. Bot. 494.

4. S. Bulbs fibrous, leaves ovato-lanceolate, brac- *latifolia*.
tes as long as the caps., flow. erect, lip of the *stem 12 inches*
nect. obtuse, shorter than the petals. S. *grandiflora* *flowers 3 to 4 upright*
Syst. Ed. 13. Lightf. With. E. Bot. *large, white*
S. *longifolia* γ. Huds.

White Helleborine. Woods. P. 5. 6. E. Bot. 271.

5. S. Bulbs fibrous, leaves ensiform, (lanceolate)
flow. erect, lip of the nect. acute. (Bractes
longer than the germen. E. Bot.)
Purple H. Hampton Common. 6. 7. E. B. 437.

1015. CYRIPEDIUM. Nect. ventricose, in-
flated, hollow. *stem leafy 12 inches, 1 rarely 2 flowers*

1. C. Root fibrous, stem-leaves ovato-lanceolate. *calceolus*. *flowers white*
lab yellow
Ladies Slipper. Woods. P. 7. Ger. 443. 2. E. B. 1.

MALAXIS. Nect. erect, 1-leaved, cordate,
concave, inclosing the Stam. and Pist.
Cor. reversed. SWARTZ. E. Bot.
WITH.

1. M. Scape 5-cornered, leaves sheathing, spatu- *paludosa*.
late. O. *paludosa* Lin.
Marsh Twayblade. Heaths. P. 6. 7. E. Bot. 72.

Tuberiform root of Or. maculata
with palmate tubercles -





a The inferior ovaries of Arist. Clematis raised into six
The Stamens united with the style and stigma, that
gynandrous —
198 GYNANDRIA. HEXANDRIA. Aristolochia.

HEXANDRIA.

Filaments very short hairy 1022. ARISTOLO'CHIA. Hexagynous. Cal. o.
The anthers on one side. Stigma 6-lobed. Cor. 1-petalled, linguiform, entire. Caps.
Herb light green bald. 6-celled, inferior.

Flowers yellow. clematilis. 1. Leaves cordate, stem erect, flowers axillary,
crowded. peduncles unflowered
green - fecundated by the
Slender Birthwort. Hedges. P. 7—9. E. Bot. 398.
imitation of the Hippocrepis

POLYANDRIA.

1028. A'RUM. Spathe 1-leaved, cowled. Spadix
naked above, bearing germens below, and
stamens (anthers) in the middle.

Obs. This curious genus is by Schreber, and Berkenhout,
placed in Class Monoecia Order Monandria, and by Haenke,
and With. in Class Polyandria Ord. Polygynia. The latter
place appears to me the most proper, for what is styled the
Spadix by Linnaeus ought rather to be considered as an
elongated receptacle, and the nectaries seem to be merely
filaments, which are by a Lusus Naturæ exhibited separate
from the anthers.

maculatum. 1. A. Leaves hastate, very entire.
Wake-robin. Shady places. P. 5. Curtis 114.

1032. ZOSTE'RA. Spadix linear, on one side fruit-
bearing. Cal. o. Cor. o. Stam. alternate.
Seeds (caps.) solitary, alternate.

Obs. This genus has been removed by Thunberg, Haenke, and
With. to Polyandria Polygynia; by Schreber to Monoecia
Monandria; but Dr. Smith is of opinion that the flow. are
neither gynandrous, as the stam. do not grow out of the
pistil, nor polyandrous, because the males are not collected
round the central female. He thinks Zostera is most easily
understood as a simple unilateral spike of naked flow., dis-
posed in 2 ranks, and has referred it to Class I. Ord. 1. with
this char. "Spadix linear, sheathed by the base of the leaf,
bearing the fructif. on one side in 2 ranks. Cal. and Cor. o.
Anth. sessile. Stigm. 2, linear. Caps. 1-seeded."

maritima. 1. Z. Pericarps sessile.
Com. Grass-wrack. Sea shores. P. 6—8. E. B. 467.
oceanica. 2. Z. Pericarps pedicelled, olive-form.
— Sea shores, P. 6—8. Ger. 1569. 8.

{ The Saly Lais at the base of this plant being detached and
felted into balls by the action of the waves of the sea, and
exposed to blackness are used in diseases of Lymphatic
system, with the same intent as Great Sponges

December 21/30

For without much dissimilation in some - Sea uest leaf

CLASS XXI.

MONOECIA.

MONANDRIA.

1203. CHA'RA. Male. Cal. o. Cor. o.
 Female. Cal. 4-leaved. Cor. o. Stigma
 3-cleft. Seed 1.
1034. ZANNICHEL'LIA. M. Cal. o. Cor. o.
 F. Cal. 1-leaved. Cor. o. Pist. 4. Seeds 4.

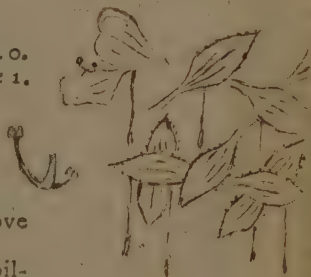
(I. *Callitriche verna*. XXII. *Salix monandra*.)

Amna trisulca

a - flower magnified

DIANDRIA.

1038. LEM'NA. Male. Cal. 1-leaved. Cor. o.
 Fem. Cal. 1-leaved. Cor. o. Style 1.
 Caps. 1-celled.



TRIANDRIA.

1040. TY'PHA. M. (Ament cylindrical, above
 the fem.) Cal. 3-leaved. Cor. o.
 F. (Ament cylindrical.) Cal. capil-
 lary. Cor. o. Style 1. Seed 1, pappus-
 bearing.
1041. SPARGA'NIUM. M. Ament nearly globu-
 lar.) Cal. 3-leaved. Cor. o.
 F. (Ament nearly globular.) Cal. 3-
 leaved. Cor. o. Stigm. (1 or) 2. Drupe
 juiceless, 1-seeded.
1046. CA'REX. M. Ament (oblong. Cal. 1-
 leaved) 1-flowered. Cor. o.
 F. Ament (oblong. Cal. 1-leaved) 1-
 flowered. Cor. 1. Style 1. Seed 1,
 coated.

(VI. *Juncus conglomeratus et effusus*. XXI.
Amaranthus. XXII. *Salix triandra*.)

TETRANDRIA.

1052. BET'ULA. M. *Ament* (nearly cylindrical. Cal.) 3-flowered. Cor. 4-parted.
F. *Ament* (nearly cylindrical. Cal.) 2-flowered. Cor. o. Styles 2. Seed 1, ovate.
1053. BAX'US. M. Cal. 3-leaved. Cor. 2-petalled.
F. Cal. 4-leaved. Cor. 3-petalled. Stig. 3.
Caps. 3-celled.
1054. URTI'CA. M. Cal. 4-leaved. Cor. o. Nect. glass-form.
F. Cal. 2-valved. Cor. o. Stigma villous.
Seed 1, ovate.
1328. LITTOREL'LA. M. Cal. 4-leaved, Cor. 4-cleft. Stam. very long.
F. Cal. o. Cor. (mostly) 4-cleft. Style very long. Seed a nut.
- NASMYTH'LA. See ERIOCAULON. Page 29.

(IV. *Ilex aquifolium*. XXII. *Myrica*.)

PENTANDRIA.

1056. XAN'THIUM. M. (Flow. compound.) Cal. common, many-leaved. Cor. 5-cleft.
Filaments connected.
F. (Flow. below the males.) Cal. o. Cor. o.
Styles 2. Drupe 2-celled.
1060. AMARAN'THUS. M. Cal. proper, 5-leaved.
Cor. o. Stam. 3—5.
F. Cal. proper, 5-leaved. Cor. o. Styles 3.
Caps. opening horizontally.

POLYANDRIA.

(Stam. more than 7.)

1065. CERATOPHYLLUM. M. Cal. about 7-parted. Cor. o. Stam. about 18.
F. Cal. about 7-parted. Cor. o. Pist. 1.
Seed 1.
1066. MYRIOPHYLLUM. M. Cal. 4-leaved. Cor. o. Stam. 8.
F. Cal. 4-leaved. Cor. o. Pist. 4. Seeds 4.
1067. SAGITTA'RIA. M. Cal. 3-leaved. Cor. 3-petalled. Stam. about 24.
F. Cal. 3-leaved. Cor. 3-petalled. Seeds numerous.

MONOECIA.

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1069. *POTER'RIUM*. M. Cal. 4-leaved. Cor. 4-parted. *Stamens* about 32.

F. Cal. 4-leaved. Cor. 4-petalled. *Pist.* 2. *Seeds* 2, covered.

1070. *QUER'CUS*. M. Cal. 5-cleft. Cor. o. *Stam.* about 10.

F. Cal. entire. Cor. o. *Styles* about 5. *Nut* coriaceous.

1072. *FA'GUS*. M. Cal. 5-cleft. Cor. o. *Stam.* about 12.

F. Cal. 4-cleft. Cor. o. *Styles* 3. *Caps.* 2-seeded.

1073. *CARPINUS*. M. *Ament* imbricated. Cor. o. *Stam.* 10.

F. Cal. 6-cleft. Cor. o. *Pist.* 2. *Nut* naked.

1074. *CORYLUS*. M. *Ament* imbricated. Cor. o. *Stam.* 8.

F. Cal. 2-leaved. Cor. o. *Styles* 2. *Nut* naked.

MONADELPHIA.

1077. *PI'NUS*. M. Cal. 4-leaved. Cor. o. *Stam.* many.

F. *Ament* strobilaceous. Cor. o. *Pist.* 2. *Nuts* 2, winged.

SYNGENESIA.

1093. *BRYO'NIA*. M. Cal. 5-toothed. Cor. 5-parted. *Filam.* 3.

F. Cal. 5-toothed. Cor. 5-parted. *Style* trifid. A *Berry*.

MONANDRIA.

1203. *CHA'RA*. M. Cal. o. Cor. o. *Anther* at the base of the *Germen*.

F. Cal. 4-leaved. Cor. o. *Stigma* 5-cleft. *Seed* 1. (*Berry* *W&S*.—*Nut* spirally striated, 1-cell., many-seeded. *GAER.*)

Obs. The flow. are considered as hermaph. by Dr. Smith, and the genus is referred to Monandria Monogynia with the annexed char. "Cal. o. Cor. o. *Anth.* sessile, *Style* o.

Berry many-seeded." From the analogy of *Hippuris* he believes the flower to be naked, regarding as leaflets only, what have been thought to constitute the calyx by LIN. See E. Bot. 336.

- tomento'sa*. 1. C. Prickles on the stem, ovate.
Brittle Stonewort. Ditches. A. 6—10. H. ox. 15. 4. 9.
- vulga'ris*. 2. C. Stems smooth, leaves toothed on the inner side. (Stem and leaves rough, striated, without prickles; leaves and leaflets tapering, channelled above, not jointed. E. Bot.)
Com. Stonewort. Pits, &c. A. 6—8. E. Bot. 336.
- his'pida*. 3. C. Prickles on the stem, capillary, crowded.
Prickly Stonewort. Ditches. — 6—10. E. Bot. 463.
- flex'ilis*. 4. C. Joints of the stem unarmed, (semi-) transparent, broader upwards. (Of equal thickness. Sch.)
Smooth Stonewort. Ponds, &c. A. 6—10. Schmid. 14.

1034. ZANNICHELLIA. M. Cal. o. Cor. o.

F. Cal. 1-leaved. Cor. o. Pist. about 4.
Seeds about 4.

palus'tris. 1. ZANNICHELLIA.

Var. 1. Anth. 2-celled, stig. crenate. Mich. 34. 2.
F. Dan. 67.

— 2. Anther 4-celled, stigmas entire. Mich. 34. 1.
Horned Pondweed. Stagnant waters. A. 6. 7. See With.

DIANDRIA.

1038. LEM'NA. M. Cal. 1-leaved. Cor. o.

F. Cal. 1-leaved. Cor. o. Style 1. Caps.
1 (or 2) -celled, 1 or 2-seeded.

Obs. It is difficult to find any of the species in flower, but they are known by the leaves sending out others from their sides.

- leaves ovate, sessile in thorn* *minor*. 1. Leaves sessile, flat on both sides, roots solitary.
Least Duck-meat. Ponds, &c. A. 6—9. Ray 4. 1.
- leaves reverse gibbous, ovate, above flat, beneath hemispherical, notched*. 2. L. Leaves sessile, hemispherical underneath, roots solitary. L. minor B. Huds.
Gibbous Duck-meat. Ponds. A. 7. 8. Mich. 11. 1. 2. 3.
- Roots clustered polyrrhiza*. 3. L. Leaves sessile, roots crowded.
Greater Duck-meat. Ponds, &c. A. 5—9. Ray 4. 2.
- leaves reverse ovate, fleshy beneath, below spathe like* *irisul'ca*. 4. L. Leaves petioled, lanceolate. *leaves*
Ivy-leaved D. Ponds, &c. A. 6—9. Mich. 11. 5.
- shaped 2 flowered male above stamens 2 female below ovary conoidish. style short thick*
Root solitary — leaves elliptical lanceolate narrow at bottom
late green yellowish forming by proliferation a triple pinnate leaf
all the Lemna have this kind of proliferation. In page 199.

Typha latifolia - Pollen abundant used to produce
 Baskets of fine - Leaves used for baskets and mats

MONOECIA. TRIANDRIA. Typha.

The stem of this rush was put into the hands
 of our Saviour TRIANDRIA. by Reubens -

1040. TY'PHA. M. Ament cylindrical. Cal. ob-
 solete, 3-leaved. Cor. o.

F. Ament cylindrical below the males.
 Cal. villous hair. Cor. o. Seed 1, sit-
 ting on a capillary pappus (standing
 on a fine bristle. WITH.)

1. T. Leaves somewhat ensiform, male and female
 spikes near together.

Great Cat's-tail. Banks of ponds. P. 7. Curt. 171.

2. T. Leaves semi-cylindrical; male and female
 spike distant from each other.

Middle Cat's-tail. Ditches, &c. P. 7. Curt. 169.

Var. 2. minima. Aments shorter, more distant,
 leaves narrower, flam. shorter than the anth-
 ers. See Dill. in R. 436. 2.

Least Cat's-tail. Ditches. P. 7. Lob. 81.

1041. SPARGA'NIUM. M. Ament (heads of flow.)
 roundish. Cal. 3-leaved. Cor. o.

F. Ament roundish. Cal. 3-leaved. Cor.
 o. Stigma (mostly simple) bifid.
 Drupe juiceless, 1 (or 2) -seeded.

1. S. Leaves triangular at the base, the sides con-
 cave, peduncles branched. CURT. HUDS.
 WITH. S. erectum a. Lin.

Greater Bur-reed. Ditches. P. 7. Curt. 342.

2. S. Leaves triangular at the base, the sides flat,
 peduncles unbranched. CURT. WITH. Styles
 longer than the germens. S. erectum b. Lin.
 sp. pl. S. simplex a. Huds.

Less Bur-reed. Fools, &c. P. 7. Curt. 341.

3. S. Leaves decumbent, flat. SP. PL. Leaves
 floating, plano-convex. FL. LAP. and SUEC.
 (Heads of flowers in a simple spike. — Style
 not longer than the germen. E. BOT.) WITH.
 S. simplex b. natans HUDS.

Floating Bur-r. Slow streams. P. 7. E. Bot. 273.

Obs. The heads of flowers are considerably smaller than in
 S. simplex, and not so numerous, being generally 2 or 3,
 very seldom more; when three, the two uppermost are
 sessile, the lowest peduncled. In some instances the
 leaves are shorter than the stem, and in that case are found
 completely submersed after heavy falls of rain, with the
 spikes just above the water. When growing entirely
 out of the water, the plants are very dwarfish. I have one
 specimen in fructification not more than four inches in
 height.

latifo'lia. Culm 6 to 8 feet
 not branched, jointed

angustifo-
 lia. Culm 3 feet slender
 Used for mats & baskets

The 2^d var. is 3 feet long
 sheaths at the base - sheaths
 large, split to the bottom into
 four resembling leaves
 leaves radical as low
 as the culm, very narrow

ramo'sum. Stem 3 feet
 peduncles alternately branched
 and bent at bottom
 upper heads male - lower female
 simplex.
 lowest flower head
 sometimes pedicelled

natans.

1046. CA'REX. Male. Ament imbricated. Cal. 1-leaved. Cor. o.

Fem. Ament imbricated. Cal. 1-leaved. Cor. o. Nectary inflated, (entire, 2, or) 3-toothed. Stigmas (2, or) 3. Seed 3-sided, within the nectary.

Obs. 2. The part which is called the nectary in the generic char., Lin. has named the capsule in the specific characters; but not very properly, as it is perfectly independent of the fruit. Dr. Smith considers it as a permanent corol. To me the terms nectary and corol appear less exceptionable than capsule; however I have chosen to adopt the last, as it is employed by Dr. Goodenough, in his two excellent papers on the British *Carexes* inserted in the second and third vol. of the Lin. Trans., from which the arrangement and characters, &c. of the species here given are borrowed.

Obs. 2. Lin. has distributed the species of *Carex* in the following manner, substituting the term spike for ament.

1. Spike single, simple.
2. Spikes androgynous.
3. Spikes distinct as to their sex, the females sessile.
4. Spikes distinct as to their sex, the fem. peduncled.
5. Spikes distinct as to their sex, male spikes more than one.

1. Spike single, simple.

Culm 3 sided dioica. 1. C. Spike simple, dioicous, margins of the capsule serrulated. LIN. HUDS.

Small Seg. Bogs. P. 6. 7. F. Dan. 369.

Var. 2. Spike androgynous; fem. flor. 1, 2, or 3, rarely more, below the males. C. capitata. HUDS. not LIN. Gent. Magaz. July 1793.

2. C. Spike simple, androgynous, male above, capsules diverging, retroflected, at each end acuminate. LIN. LEERS. HUDS.

Flea Seg. Bogs. P. 16. Leers. 14. 1.

3. C. Spike simple, androgynous, fem. florets about 3, rather remote, spreading, male flow. about 1, terminating. LIGHTF. C. patula. HUDS.

Few-flowered Seg. Mount. heaths. P. 6. Lightf. 6. 2.

2. Spike compound, androgynous. (C. atrata.)

Roots rather creep. 4. C. Spikelets about 3, remote, caps. diverging, acute, mouth undivided (or very little cloven) C. muricata. HUDS. Lightf.

12 in. culm 12 in. sheath 3 sided. Watery places. P. 5. 6. Leers 14. 7.

Leaves pale green. bracted very long. rib head. 5. C. Spikelets about 6, ovate, rather remote, naked, scales ovate, rather acute, shorter than the caps, C. brizoides. HUDS. C. canescens. Lightf.

Root in thick tufts - Culm slender, 2 feet - leaves pale. White Seg. Marshy places. P. 6. Leers 14. 7.

Green spike slender, very long. Bracted leaf-like, spreading - glumes acute, whitish, with a green rib.

6. *C. Spikel.* about 6, oval, approximate, alternate, *ova'lis*. *Roots in tufts*
scales lanceolate, acute, as long as the caps. *culm 2 feet naked above*
(Male fl. few at the base of the spikel., fem. *apex drooping - bracted*
flow. numerous, terminating.) *C. leporina.*
Huds. Lightf. *glumaceous, rib ending*
Naked Seg. Marshes, &c. P. 6. E. Bot. 306. *in a bristle, glumes brown*
red - rib green -
7. *C. Spikelets* axillary, solitary, remote, nearly *remo'ta.* - *Root in*
sessile, (floral) leaflets very long, caps. (generally) undivided at the end. (Culm soft, *thick tufts - Culm slender*
weak.) HUDS. LIGHTF. *2 feet - spike very long*
drooping - bracts trifida
Remote Seg. Sides of ditches. P. 5. 6. Leers 15. 1. *spreading - glumes acute*
axilla'ris. *bracted long as*
the spike
8. *C. Spikel.* axillary, mostly 3-together, remote, sessile, leaflets long, caps. (generally) divided at the end. (Culm rigid.)
— Near Putney. CURT. 5. 6. Lin. Tr. ii. 19. 1. *Root long*
spikelets crowded together, involucre none, and creeping, when perisperm
culm incurved. roundish, smooth - tender, and like others
9. *C. Spike* conical, compounded of several sessile *incur'va.* — *Loose sea sand.* P. 7. 8. Lightf. 24. 1. *of the species used as forage*
10. *C. Spike* leafy, oblong, rather acute, spikelets *arena'ria.* *Root very long*
many, terminating ones male, lower female, *culm 18 in. bent, naked*
culm incurved. LIN. HUDS. LIGHTF. *glumes acute, yellowish*
Sea Seg. Sand on the sea sh. P. 6. With. P. 20. *green -*
11. *C. Spike* oblong, obtuse, spikelets several, the *interme'dia.* *Culm 18 inch*
upper and lower female, the middle male, culm *angul.* *acute, rough*
erect. *C. disticha.* Huds. Lightf. *glumes acute, brown with a pale*
Soft Seg. Marshes. P. 5. 6. Leers 14. 2. *rib -*
12. *C. Spike* ovate, somewhat decompound, (floral) *divi'sa.* *Root thick &*
leaflet erect, spikelets rather crowded, cap- *twisted - Culm much*
sules appressed, root creeping. HUDS. *2 feet glumes brown with*
Marsh Seg. Salt marshes. P. 6. Lin. Tr. ii. 19. 2. *a pale edge & keel -*
13. *C. Spike* oblong, somewhat decompound, spike- *murica'ta, Culm up to*
lets distinct, caps. diverging, (rather hispid at *18 inches 3 sided sides*
the margin) mouth divided, root fibrous. *flat, angles acute &*
(Spikelets more numerous and contiguous *rough, leaves narrow*
than in *C. Stellulata*.) LIN. *C. spicata.* Huds. *keeled, spike 6 to 8.*
Lightf. *Spiked Seg.* Watery places. P. 5. 6. Ger. 21. 6. *keeled - bracted water*
Var. 2. More slender, spike less compound, *glume ferruginous*
culm less rough, and roundish at the bottom. *with the margin keel*
WITH. Barr. 19. *greenish -*
14. *C. Spike* elongated, decompound, somewhat *divi'sa.* *culm 3 sided -*
branched at the base, lower spikelets remote, *sides flat, angles rough*
highest contiguous, caps. nearly erect. *C. 12 inch - glumes acute*
canescens. HUDS. *scabrous*
Grey Seg. Shady places. P. 5—8. Mich. 33. 10. 11.

- vulpi'na*. 15. C. Spike more than decomposed, compactly-branched, obtuse, spikelets with male flow. above; caps. diverging, angles of the culm very acute (the sides hollowed). LIN. HUDS.
Culm, 3 sided, angles very acute, sides concave
leaves broad, sharp-pointed
glumes acute, brown
 Great Seg. Bogs, &c. P. 5. 6. E. Bot. 307.
 Var. 1. Spike decomposed, bractes awned. ST. LEERS 14. 5.
 — 2. Spike compact, bractes awned. ST. GER. 21. 5.
 — 3. Spikes less compact, bractes pointed. ST. LEERS 14. 3. See Withering.
- teretius'-cula*. 16. C. Spike more than decomposed, compactly-branched, somewhat acute, spikelets male above, caps. spreading, culm roundish. *12 inches high*
 — Marshes. CROWE. P. 5. Lin. Tr. ii. 19. 3.
- panicula'-ta*. 17. C. Spike more than decomposed, panicled-branched, acute, branches alternate, somewhat remote, caps. spreading, culm 3-cornered. LIN. HUDS. *Culm 3 feet high*
leaves erect, firm, light-green
 Panicled Seg. Watery places. P. 5. 6. LEERS 14. 4.
 Var. 2. Raceme simple, branches distant.
3. Spikes one male, the others female, bractes membranous (not leaf-like).
- female spike digita'ta*. 18. C. Bractes membranous, mostly leafless, sheathing half the peduncle, spikes linear, erect, male spike shorter, caps. distant. LIN. HUDS.
3, finger-like, foot stalked
Culm obtusely 3 sided
glumes reddish
 Fingered Seg. Woods, &c. P. 5. 6. LEERS 16. 4.
- male spike clandestin'*. 19. C. Bractes membranous, mostly leafless, sheathing; fem. spikes oblong, remote, scarcely longer than the sheath.
foot stalked na.
female concealed in the bract - bract brown
red sheathing glumes dark brown
 — St. Vincent's rocks. SOLE. P. 4. Mich. 32. 8.
4. Spikes one male, the others female, bractes leaf-like, and generally sheathing.
- pendula*. 20. C. Sheaths long, including nearly the whole peduncle, spikes cylindrical, very long, pendulous, caps. ovate, acute. HUDS. LIGHTF.
 Pendulous Seg. Moist places. P. 5. 6. Curt. 180.
- strigo'sa*. 21. C. Sheaths long including almost the whole peduncle, spikes filiform, loose, pendulous, caps. oblong, rather 3-cornered, acute. HUDS.
 Loose Seg. Shady places. P. 4. 5. Lin. Tr. ii. 20. 5.
- pra'cox*. 22. C. Sheaths short, nearly as long as the peduncle, spikes approximated, male spike somewhat club-shaped, fem. ovate, caps. roundish, pubescent. JACQ. C. montana. HUDS. LIGHTF.
Culm 3 sided, edges blunt
6 in leaves in tufts showing
male spikes thick club-shaped - female spikes into a short foot stalk - bractes awned
glumes ferruginous
 — Moist heaths. P. 4. 5. Ger. 22. 8. upper fig.

23. C. Sheaths short, nearly as long as the pedunc., *filiformis*. Culm naked male spikes generally 2, linear, fem. ovate, remote, caps. rough-haired. LIN. C. *tomentosa*. Lightf. *fr. spikes lanceolate, glumes black*. Downy Seg. Heaths. P. 6. Lin. Tr. ii. 20. 5. *not keeled - female spikes 2 ovate oblong -*
24. C. Sheaths short, nearly as long as the pedunc., *flava*. leaflet diverging (so as to stand horizontally). Culm 1 foot 3-sides Male spike linear, fem. roundish, caps. rostrato-acuminate. LIN. HUDS. LIGHTF. Yellow Seg. Heaths, &c. P. 5. 6. Leers 15. 6. Var. 2. *fulva*. With two fem. spikes. L. TR. iii. P. 77. *Obs.* This variety was made a distinct species in Dr. Goodenough's former paper, with the annexed character: "Lowest sheath inclosing about half the peduncle, upper ones nearly the whole, fem. spikes 2, oblong, acute, caps. rostrato-acuminate. L. Tr. ii. 20. 6.
25. C. Sheaths very short, as long as the peduncle, *extensa*. leaflet somewhat reflected, spikes crowded, female sp. roundish, caps. ovate, acute. (Whole plant slenderer and taller than C. *flava*.) C. *flava* β. Huds. — Marshy ground. — Lin. Tr. ii. 21. 7.
26. C. Lowest sheath including nearly half the peduncle, upper nearly the whole, spikes oblong, very remote, caps. acute. HUDS. LIGHT. Loose Seg. Marshes. P. 5. 6. F. Dan. 1049. *dis'tans*.
27. C. Lowest sheath including about half the pedunc., the upper nearly the whole, spikes linear, remote, caps. (alternate) inflated, rather distant and obtuse. LIGHTF. *panic'ea*. Pinky Seg. Moist pastures. P. 5. 6. Leers 15. 5.
28. C. Sheaths half as long as the peduncle, female spikes oblong (4—8-flowered) limber, when in fruit pendulous, pedunc. capillary, caps. acuminate. LIGHTF. *capilla'ris*. Capillary Seg. Highl. mount. P. 7. 8. F. Dan. 168.
29. C. Sheaths including about $\frac{1}{3}$ of the peduncle, *depauperata*. fem. spikes remote, few-flowered, caps. inflated, ovate, rostrato-acuminate (generally 2-rowed, imbricated). C. *ventricosa*. CURT. *Charlton Seg.* Dry woods. P. 5. 6. Curt.
30. C. Sheaths one fourth of the length of the peduncle, spikes filiform, limber, pendulous, caps. ovate, awn-beaked. HUDS. LIGHTF. C. *vesicaria* β. Lin. Wood Seg. Woods. P. 5. 6. Leers 15. 2. *sylvat'ica*.

recur'va. 31. C. Sheath one fourth of the length of the peduncle, fem. spikes nearly cylindrical, (in an advanced period of fructific.) pendulous, caps. (crowded) roundish-ovate, root creeping. HUDS.

Heath Seg. Moist heaths, &c. P. 5. 6. *Leers* 15. 3.

pallas'-cens. 32. C. Sheaths very short, fem. spikes nearly cylindrical, when in fruit pendulous, caps. somewhat 3-cornered, oblong, obtuse. LIN. HUDS. LIGHT.

Pale Seg. Moist pastures. P. 5. 6. *F. Dan.* 1050.

limo'sa. 33. C. Sheaths scarcely any, fem. spikes ovate, pendulous, caps. ovate, compressed, root creeping. LIN. HUDS.

Brown Seg. Bogs. P. 6. *F. Dan.* 646.

pseu'do-cype'rus. 34. C. Sheaths scarcely any, fem. spikes cylindrical, peduncled, pendulous, capsules nerved, oblong, awn-beaked, somewhat diverging. LIN. HUDS. LIGHT.

Bastard Seg. Banks of pools, &c. P. 6. *E. Bot.* 242.

atra'ta. 35. C. Sheaths scarcely any, all the spikes androgynous, peduncled, when in fruit pendulous, caps. ovate, rather acute. LIN. HUDS. LIGHT.

Black Seg. Highland mount. P. 6. 8. *F. Dan.* 158.

pilulif'e-ra. 36. C. Sheaths none, male spike nearly linear, female sp. crowded, roundish, sessile, culm weak. LIN. HUDS. LIGHT.

Pill-bearing Seg. Heaths. P. 4. 6. *F. Dan.* 1048.

pul'la. 37. C. Stigmas 2, sheaths 0, spikes ovate, the lower one peduncled, caps. ovate, mucronate, point forked.

— Mount. in Scotland. *Lin. Tr.* iii. tab. 14.

Obs. Male spikes sometimes two, fem. spike sometimes only one.

rig'ida. 38. C. Stigmas 2, sheaths 0, spikes oblong, nearly sessile (the lowest often peduncled), leaves somewhat recurved, rigid. C. *saxatilis.* HUDS.

— High mountains. P. 4. 5. *Lin. Tr.* 22. 10.

caespito'-sa. 39. C. Stigmas 2, sheaths 0, spikes nearly sessile, somewhat cylindrical, obtuse, leaves erect, softish. LIN. *glume black*

— Moist places. P. 5. *Lin. Tr.* ii. 21. 8.

stric'ta. 40. C. Stigmas 2, sheaths 0, spikes nearly sessile, cylindrical, acute, male sp. mostly 2, leaves erect, stiff and straight. (Sheaths of the root-leaves split so as to form an open net-work, they and the floral-leaves shorter than the culm when flowering.) C. *caespitosa.* HUDS. *β.* LIGHT.

— Marshes. P. 4. *Lin. Tr.* ii. 21. 9.

5. *Spikes male and female, male spikes more than 1.*
(C. filiformis, recurva, pulla, stricta; and some others have, though rarely, 2 male spikes.)
41. *C. Spikes oblong, acute, scales of the male sp. ripa'ria.*
lanceolate, of the fem. aristato-acuminate,
caps. ovato-lanceolate, cloven into two teeth at
the end. (Male sp. black, triangular.) CURT.
C. acuta. Huds. Lightf.
Great Seg. Moist places. P. 4. 5. Curt. 281.
42. *C. Spikes oblong, rather obtuse, scales of the paludo'sa.*
male sp. obtuse, of the fem. lanceolate, caps.
ovato-lanceolate, somewhat toothed at the
end (or entire). C. acuta. Curt.
Acute Seg. Banks of canals. P. 4—6. Curt. 280.
43. *C. Stigmas 2, spikes filiform, fem. when in acu'ta. male spikes 2 or 3*
flower nodding, when in fruit erect, caps. female 4 or 5 with a short foot
rather acute, undivided at the end. C. gracilis. Curt. - culm acute angled
high - 2 feet
- Slender-spiked Seg. Ditches, &c. — 4—6. Curt.*
44. *C. Male spikes linear, fem. oblong, spreading, vesicaria. Culm 2 feet.*
caps. inflated, oblong, rostrato-acuminate, male spikes light brown
spreading. LIN. C. inflata. Huds. Lightf. - female
Bladder Seg. Marshes. P. 5. 6. F. Dan. 647. - culm 2 feet
45. *C. Spikes filiform, male sp. slenderer, female ampullal-*
cylindrical, erect, caps. inflated, globular, cea. Culm upright 2 feet
awn-beaked, diverging. C. vesicaria. Huds. 2-sided angles bald below
Lightf. - rough above the lowest joint
- Beaked Seg. Bogs, &c. P. 5—7. Leers 16. 2. ii.*
46. *C. Hairy, all the spikes oblong, female sp. remote, hir'ta. male spikes 2*
sheathed, sheaths on one side villous, caps. lanceolate female 3 oblong
rough-haired. LIN. HUDS. LIGHTF. - leaves glaucous on the
Hairy Seg. Meadows, &c. P. 5. 6. Leers 16. 3. upper face -
- Obs. All the species with androgynous spikes have their*
stigma bifid, except C. pauciflora; and those with distinct
male and female spikes have it trifid, except C. pulla,
capitata, rigida, and stricta.
- Obs. 2. The investigation of the different species of Carex*
is rendered difficult by an occasional variation in the dis-
inctive marks, e. g. the length of the foliaceous bracts
is not absolutely constant; male flowers are sometimes
found in the female spikes, and vice versa; the peduncle
of the female spikes, which in some species is generally
sessile, is at other times found of considerable length, and
the division of the caps. at the summit is sometimes pre-
sent, sometimes wanting.
- Obs. 3. All the Carices are believed by Dr. Goodenough*
to dispose of their seeds by the opening of the point of
their capsule, but in some this opening is not observable

Betula alba - The bark used anciently for writing on; leaves up-
 outwardly and taken internally in drops - also used to dye
 yellow; barks used for brooms and for correction on account of their
 astringency; 210

MONOECIA, TETRANDRIA, *Betula*.

juice obtained by piercing till they be in an advanced state of fructification, he has
 therefore described them as closed. — See Lin. Tran.
 vol. ii. and iii.

is here under a large
 name nearly this to the bark on the opposite side is saccharum
 and may be fermented either

TETRANDRIA.

into Wine or Beer - Wood 1052. BET'ULA. M. Cal. 1-leaved, 3-cleft, 3-
 flowered. Cor. 4-parted.
 F. Cal. 1-leaved, about 3-cleft, 2-flowered.
 Seeds winged with a membrane on both
 sides,

Bark white al'ba. 1. B. Leaves ovate, acuminate, serrated. (Leaves
 triangulari-lanceolate, acute, smooth, doubly
 serrated. WITH.)
 epidermis peeling off
 leaves beneath pubes.
 twigs & buds blackish
 Var. 1. Branches erect, stiff. Var. 2. Branches
 pliable, pendent.

Leaves dark al'nus. 2. B. Peduncles branched. (Leaves roundish, glutin-
 ous; veins underneath, woolly at the base. WITH.)
 green shining -
 inner bark pungent
 na'na. 3. B. Leaves circular, crenate.
 Alder or Owlcr. Watery places. T. 2. 3. Ger. 1477. 1.

Stem 3 feet high leaves
 3 from each bud - 1053. BUX'us. M. Cal. 3-leaved. Pet. 2. Ger-
 men a rudiment only.
 F. Cal. 4-leaved. Pet. 3. Styles 3. Caps.
 3-beaked, 3-celled. Seeds 2.

Wood sudorific
 leaves cathartic
 and vermifuge
 1. BUXUS.
 Com. Box. Hedges, &c. P. 4. Sheldr. 85. Ger. 1410.

1054. URTI'CA. M. Cal. 4-leaved. Cor. o. Nect.
 central, glass-form.
 F. Cal. 2-valved. Cor. o. Seed 1, shining.

Stem bluish pilulif'era. 1. U. Leaves opposite, ovate, serrated, fruit-bearing
 aments globular.

Roman Nettle. Rubbish. A. 8. E. Bot. 148.

Herb light green u'rens. 2. U. Leaves opposite, oval. (Stem branched. WITH.)
 Less Net. Rubbish. A. 7—9. F. Dan. 739. Ger. 707.

Herb dark green dioic'ca. 3. U. Leaves opposite, cordate, racemes in pairs.
 (Flow. dioicous.)
 Com. Nettle. Hedges, &c. P. 7. Woodv. 146.

1328. LITTOREL'LA. M. Cal. 4-leaved. Cor.
 4-cleft. Stam. long.
 F. Cal. o. Cor. about 4-cleft (unequally 3-
 cleft). Style long. Seed a nucleus.

lacus'tris. 1. LITTORELLA.
 Plantain Shoreweed. Marshy pl. P. 6—8. E. Bot. 468.

Nettle
 stalk steeped as hemp for cordage, cloth or paper - Young
 its eaten in spring as a potherb - leaves pressed against
 of the mouth will stop a bleeding at the nose; juice
 eyes most green; a decoction of the wood with salt

PENTANDRIA.

1056. XANTHIUM. M. Cal. common, imbricated. Cor. 1-petalled, funnel-shaped,

5-cleft. Recept. chaffy.

F. Cal. invol. 2-leaved, 2-flowered.

Cor. o. Drupe (Capsule WITH.) dry, muricate, bifid. Nucleus 2-celled.

1. X. Stem unarmed, leaves cordate, 3-nerved.

Not for use. Too much harsh. struma'ri- flowers green

Less Burdock. Dunghills. A. 6—9, F. Dan. 970.

um. leaves lobed

1060. AMARANTHUS. M. Cal. 3, or 5-leaved.

lobed serrated - minutely ribbed

Cor. o. Stam. 3, or 5.

F. Cal. 3, or 5-leaved. Cor. o. Styles

3. Caps. 1-celled, opening horizontally. Seed 1.

1. A. Glomerules lateral, flowers 3-cleft, leaves ovate, retuse, stem diffuse. (Flow. triandrous, somewhat spiked. WILLDEN. Hist.)

Blitum.

Small Red Blite. Rubbish. A. 8. Pet. 7.

POLYANDRIA.

(Stamens more than seven.)

1065. CERATOPHYLLUM. M. Cal. many-parted. Cor. o. Stam. 16—20.

F. Cal. many-parted. Cor. o. Pistil 1.

Style o. Seed 1, naked.

1. C. Leaves dichotomo-bigeminate, fruit 3-thorned. (Caps. ovate, with a thorn-like beak, and two straight thorns at the base. ROTH.—Leaves forked, toothed, lower ones linear, upper ones much crowded, tubular, and inflated, beaks of the caps. of equal length. WITH. See RAY syn. 135. 1.)

demersum, leaves two feet in height - plant herbaceous aquatic floating under the surface - often has leaves in whorls of 8. back-toothed & spinulose

Com. Hornwort. Streams. P. 8. 9. Vaill. 1719. 2. 1.

2. C. Leaves dichotomo-trigeminate, fruit thornless. (Leaf smooth, armed with 8 horns, slenderer, and more frequently divided, seed smooth. DILL. in R. 135. 2.—Leaves forked, toothed, lower ones tubular and somewhat inflated, upper ones capillary, near together, caps. with a short blunt point. WITH.)

submersum, leaves forked 3 parted - fruit watery leaves more numerous than in C. demersum

C. demersum β. Huds.

— Ditches. — Vaill. Hist. de l'Acad. 1719. 2. 2.

[*Sagittaria sagittifolia*. Submersive, eaten by the Chinese by whom the root is cultivated in watery places]

Obs. It is doubtful whether this be specifically distinct. *Flor. Dan.* 510. is referred to for both species, for *submersum* by Murray, for *demersum* by With.

1066. MYRIOPHYLLUM. *M. Cal.* 4-leaved. *Cor.* 4-parted. *Stam.* 8.

Herb. floosling, stem branched combslike *F. Cal.* 4-leaved. *Cor.* 0. *Pist.* 4. *Style* 0. *Seeds* 4, naked.

Female flower spica'tum. 1. *M. Male flow.* in interrupted spikes. (Spike leafless—Petals 4, soon falling off. *E. Bot.*)

yellow stigmata yellow *Spiked Water-Millfoil.* *Stag. wat. P.* 5. 8. *E. Bot.* 83.

Male flower reddish *leaves 4 in a whorl* *verticilla'tum.* 2. *M. (Stem simple.) All the flow. verticillate,*

leaves 5 in a whorl *herm. (Pet. 4, soon falling off.)* *Whirled Millfoil.* *Canals, &c.* *P.* 6. 7. *E. Bot.* 218.

flowers at axils in whorls *Stigmata thick feathered as if* *Obs. Male and fem., as well as herm. flow. occur on the same plant.* *WOODW.*

First leaves sharp shaped 1067. SAGITTA'RIA. *M. Cal.* 3-leaved. *Cor.* 3-petalled. *Filam.* about 24.

the succeeding sagittate, reticulated *F. Cal.* 3-leaved. *Cor.* 3-petalled. *Pist.* many. *Seeds* many, naked.

veined. scape beagled. flowers 3 *in a whorl. male flowers with one* *long style* *sagittifolia.* 1. *S. Leaves sagittate, acute.*

Com. Arrow-head. *Banks of rivers.* *P.* 7. *E. Bot.* 84.

1069. POTE'RIUM. *M. Cal.* 4-leaved. *Cor.* 4-parted. *Stam.* 30—40.

Root woody, leaflets roundish *F. Cal.* 4-leaved. *Cor.* 4-parted. *Pist.* 2.

flowers in heads; when flowers *Berry formed of the indurated tube of the corol.*

male. lower *sanguisorbia.* 1. *P. Unarmed, stems rather angular.* *Upland Burnet.* *Chalky pastures.* *P.* 4. 5. *Curt.*

females. ba. 1070. QUER'CUS. *M. Cal.* commonly 5-cleft. *Cor.* 0. *Stam.* 5—10.

The wood of all the oaks *F. Cal.* 1-leaved, very entire, rough. *Cor.* 0. *Styles* 2—5. *Seed* 1, ovate.

is hard and tough tolerably *flexible, not easily splintered* *very durable.* *Ro'bur.* 1. *Q. Leaves petioled, oblong, broadest towards the*

end, indentations rather acute, angles obtuse, *fruit nearly sessile.* *WITH.* *Q. Robur B. Huds.*

wood used to die leather *Var. 2. sessilis. MART.* *Sessile-fruited Oak.* *Woods.* *T.* 4. *Martin* 11.

and brown; bark like leather *2. Q. Leaves oblong, on short petioles, obtuse, sinu-*

at little *peduncu-* *lata.* *ato-pinnatifid; fruit mostly solitary, on long*

as when dies woollen *peduncles. EHRH. Q. femina. With. Q. Robur*

these - leaves eaten by *a. Huds. Var. 1. pedunculata. Mart.* *True British Oak.* *Woods.* *T.* 4. *Martin.* 10.

goats, sheep and goat. *Obs. Both the above species are included by Lin. under Q.*

is called Acorn, i. e. Oak. acorn fattens swine and deer; balls *called oak apples, produced by insects, dyed with copperas - more*

beautiful black than nut-galls but less durable.

broader above, indentations rather acute, angles obtuse."

1072. *FA'GUS*. M. Cal. 5-cleft, campanulate. *Chesnut*
Hernault's cupula 2 or 3 flowered
 Cor. o. Stam. 12. *4 lobed, armed with sharp spines*
 F. Cal. 4-toothed. Cor. o. Styles 3. *along the axis*
 Caps. (the calyx before) muricated, 4-
 valved, 2-seeded. *male fruit pendulous*

1. F. Leaves lanceolate, acuminate, serrated, naked *castanea*. *glabrous dense fern 2 lobed armed*
 underneath. Wood durable. *but now usually cut green for top*
Chesnut-tree. Woods, &c. T. 5. Hunter i. p. 153.

2. F. Leaves ovate, indistinctly serrated: *syloatica*. *Wood endures*
Beech-tree. Woods, &c. T. 4. 5. Hunter i. p. 131. *decaying in the sun*

1073. *CARPINUS*. M. Cal. 1-leaved, a ciliate *but lasting under water*
 scale. Cor. o. Stam. 20. *leaves used for stuffing mattresses, the*
 F. Cal. 1-leaved, a ciliate scale. Cor. o. *leaves called mast for beer*
 Germ. 2. Styles 2 upon each germ. *Swiss, when dried they*
 Nut ovate. (Cor. calyx-like, 1-leaved, *may be made into bread*
 6-cleft, 2 segm. larger.) *also roasted for coffee & pressed for oil*

- C. Scales of the strobiles flat. *leaves ovate toothed* *Cast'ulus*. *Bark white &*
Horn-beam Tree. Hedges, &c. T. 5. Hunt. i. p. 138. *smooth - inner bark*

1074. *CORYLUS*. M. Cal. 1-leaved, 3-cleft, *leaves yellow wood white*
 scale-form, one-flowered. Cor. o. *very tough, grows hard*
 Stam. 8. *like horn, used in mil-*
 F. Cal. 2-leaved, lacerated. Cor. o. *work, inner like a cast*

- Styles 2. Nut ovate.
 1. C. Stipules ovate, obtuse. (Stip. lanceolate; *avella'na*. - *leaves & leaves cordate, roundish, twigs hairy*. *after the inner. eyes*
 AITON.) *blood red - 2 flowers*
Hazel-nut Tree. Hedges. T. 4. 5. Hunt. i. p. 213. *the part of the heart is*

MONADELPHIA.

1077. *PI'NUS*. M. Cal. 4-leaved. Cor. o. Stam. *for walking sticks, piling rows*
 many. Anth. naked. *crates look charcoal - Nut*
 F. Cal. forming Strobiles, each scale 2-
 flowered. Cor. o. Pist. 1. Nut with
 a membranous wing. *Eaten & expressed for oil*

1. P. Leaves in pairs, primordial ones solitary, *syloes'tris*.
 smooth. (Cones ovato-conical, mostly in *Smash tute, Strait*
 pairs, as long as the leaves, scales oblong, ob-
 tuse. WITH.) *Wood used for timber*
red or yellow dottle

- Scotch Fir. Scotch mount. T. 5. Hunt. i. p. 274. *juice resinous becomes*
solid - Bark used to
tan leather and mixed
with made into bread
in the northern countries

SYNGENESIA.

1093. BRYO'NIA. M. Cal. 5-toothed. Cor. 5-parted. Fil. 3. (Anth. 5, sometimes 6, united in pairs.)

F. Cal. 5-toothed. Cor. 5-parted. Style 3-cleft. Berry rather globular, many-seeded (mostly 1-seeded. WITH.).

Male Strobili 3, two of which are joined at the base

Female - Styles 3 cut -

Leaves, bristly - dioica.

shaped 5-lobed - fruit red

Root extremely lower

Stem slender, climbing - Peduncles axillary - Galls white

{ Book acid, purgative, in doses of one drachm in an infusion of ralf an ounce

Cucumis - Plant monocious; calyx lobes and shape, Corolla bell shape - Male Filaments 3 of which 2 are joined at the base; anthers soldered - Female Filaments 3 in short anthers style one, Stigmata 3, 2 paired - Fruit large bilocular, cells parted; seeds ovate compressed; edge acute

Cucumis sativus - Cultivated cucumber

Leaves angular, angles acute, Fruit oblong rough, there are many varieties - It is cooling but very slightly nutritive, the small sort used as a pickle; juice of the fruit with salt and cayenne pepper, used as a sauce

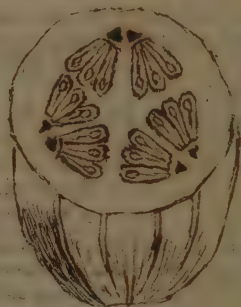
{ The Figure represents the fruit cut transversely; calls three together - the placentaria at the angles.

Cucurbita esculenta - Eatable gourd

The fructification is similar to that of the cucumber, and the parts of the fruit also similar - The style of the female flower is shorter & stigmata thickened -

Cucumis moschatus - Musky cucumber - Melon -

Leaves with rounded angles - fruit mostly, skin reticulated - many varieties - It has a peculiar smell, and flavor liked by some, and as strongly disliked by others - Eaten with wine and sugar, or with salt and pepper, as one of the highest luxuries, especially when just gathered, by those who relish



CLASS XXII.

DIOECIA.

DIANDRIA.

1098. SA'LIX. M. Ament (oblong, imbricated)
Scale (1-flowered). Cor. o. Stam. 2,
rarely 3.

F. Ament Scale. Cor. o. Stigm. 2. Caps.
2-valved. Seeds downy.

Salix herbacea - a barren plant. *b* one of its flowers magnified
a fertile plant, *d* one of its flowers magnified - a rectary.

TRIANDRIA.

1100. EM'PETRUM. M. Cal. 3-parted. Cor. 3-
petalled.
F. Cal. 3-parted. Cor. 3-petalled. Styles
9. Berry 9-seeded.

(III. *Valeriana dioica*. XXI. *Carex dioica*. Bry-
onia.)

TETRANDRIA.

1105. VIS'CUM. M. Cal. 4-parted. Cor. o.
(Filam. o.)
F. Cal. 4-leaved. Cor. o. Stig. obtuse.
Berry 1-seeded, inferior.

1106. HIPPOPH'AE. M. Cal. 2-parted. Cor. o.
F. Cal. bifid. Cor. o. Pist. 1. Berry
1-seeded, aril truncated.

1107. MYRI'CA. M. Ament (ovato-oblong)
Scale (1-flowered). Cor. g.
F. Ament Scale. Cor. o. Styles 2. Berry
1-seeded.

(IV. *Ilex*. V. *Rhamnus catharticus*. *Thesium*
alpinum. XX. *Ophrys corallorrhiza*. XXI.
Urtica dioica.)

PENTANDRIA.

1116. HU'MULUS. M. Cal. 5-leaved. Cor. o.
F. Cal. 1-leaved (with an oblique opening). Cor. o. Styles 2. Seed 1, winged with the calyx.

(*Salix pentandra*. V. *Pimpinella dioica*.)

HEXANDRIA.

1119. TA'MUS. M. Cal. 6-leaved (6-parted).
Cor. o.
F. Cal. 6-leaved. Cor. o. Style 3-cleft.
Berry 3-celled, inferior.

(VI. *Asparagus*. *Rumex acetosa*, et *Acetosella*.)

OCTANDRIA

1123. PO'PULUS. M. Ament (oblong, imbricated; scales 1-flowered) lacerated. Cor. o.
Nect. ovate. Stam. 8—16.
F. Ament lacerated. Cor. o. Stig. 4-cleft.
Caps. 2-valved. Seeds pappous.
1124. RHODI'OLA. M. Cal. 4-parted. Cor. 4-petalled.
F. Cal. 4-parted. Cor. o. Pist. 4. Caps. 4, many-seeded.

ENNEANDRIA.

1125. MERCURIA' LIS. M. Cal. scarcely any.
Cor. 5-cleft.
F. Cal. 5-toothed. Cor. 5-petalled. Stig. 8. Berry many-seeded.
1126. HYDROCH'ARIS. M. Cal. 3-leaved (3-cleft).
Cor. 3-petalled.
F. Cal. 3-leaved. Cor. 3-petalled. Styles 6. Caps. inferior, 6-celled.

DECANDRIA.

(X. *Cucubalus ovites*. *Lychnis diurna*, et *vespertina*.)



Populus alba - 1 Branch Catkin 2 Blossom of same magnified w
its scale 3 Catkin of fertile flowers 4 One of them magnified

ICOSANDRIA.

(XII. *Rubus chamaemoris*.)

POLYANDRIA.

(XIII. *Stratiotes aloides*.)

MONADELPHIA.

1134. JUNIP'ERUS. M. Ament (conical.) Cor.

o. Stam. 3.

F. Cal. 3-parted. Cor. 3-petalled. Styles

3. Berry inferior, 3-seeded, calycine
(the calyx at the base. WITH.).

1135. TAX'US. M. Cal. 4-leaved. Cor. o. Anth.

8-cleft.

F. Cal. 4-leaved. Cor. o. Stig. 1. Berry
1-seeded, upper half wanting.

SYNGENESIA.

1139. RUS'CUS. M. Cal. 6-leaved. Cor. o.

Stam. 5.

F. Cal. 6-leaved. Cor. o. Pist. 1. Berry
3-celled, 2-seeded.(XIX. *Gnaphalium dioicum*. XXI. *Bryonia*
dioica.)

DIANDRIA.

1098. SA'LIX. M. Cal. scale of an Ament (1-
flowered). Cor. o. A nectariferous
gland at the base of the stam.

F. Cal. scale of an Ament (1-flowered).

Cor. o. Style bifid. Caps. 1-celled,

2-valved. Seeds pappous.

1. Leaves smooth, serrated.

1. S. Leaves oblongo-lanceolate, flowers with 3
stamens (sometimes 2. HUDS.).

Smooth Willow. Hedges. S. 4. 5. Hoff. S. i. 9 & 10.

FF

trian'dra, leaves 3 inches in
above light green, beneath
rather glaucous
Bark striate -

- Branches long monan'dra. 2. S. Leaves lineari-lanceolate, upper leaves oblique, aments downy, flowers monandrous. HOFFM.
purple-leaves glaucous below WITH. S. purpurea and Helix. LIN.
very bitter Rose or Purple Willow. Hedges, &c. Hoff. i. 1 & 5.
- ament-odorous pentan'dra. 3. S. Leaves ovate, acute, flowers pentandrous
Sweet Willow. Hedges, &c. S. 4. Fl. Lapp. 8. z.
- leaves below silky vitelli'na. 4. S. Leaves ovate, (ovato-lanceolate) acute, serratures cartilaginous, petioles callous, dotted.
serratures of leaves cartilag. Yellow Willow. Osier hols. T. 5. Hoff. i. 11. & 12.
- branches shining amygdali'- 5. S. Leaves lanceolate, petioled, stipules trapeziform. leaves glaucous below
na. Almond-leaved W. Banks of riv. S. 4-5. Park. 1430. 5.
- Branches bald frag'ilis. 6. S. Leaves ovato-lanceolate, petioles toothed, glandular. (Young leaves beset on both sides with whitish appressed hairs. WILLD.)
little na. Crack Willow. Hedges, &c. T. 4. 5. Woodv. 198.
- Tree tall myrsini'tes. 7. S. Leaves ovate, venous (semi-transparent).
Branches crooked Whortle-leav. W. Highl. mount. S. 6. Hoff. i. 17. 18. 19.
- leaves cold 3/4 in Capsules pubescent Obs. The last year's leaves dry, membranous, venoso-reticulated, remaining till the following summer. VAHL.
shrub 2 feet high
- Stem 1 inch high herba'cea. 8. S. Leaves orbicular. Fig. 4. p. 215.
leaves light green Herbaceous Will. On Snowdon. S. 7. F. Dan. 117.
- Stem short retu'sa. 9. S. Leaves slightly serrated, obovate, very obtuse.
leaves green above veins red (Leaves with parallel veins.)
capsule villous — Ben Lawers. Scotl. — Gmel. fl. i. 95. 2.
2. Leaves smooth, very entire.
- reticula'- 10. S. Leaves ovate, obtuse. (With a net-work of veins underneath, at first red, afterwards green.)
ta. Net-work W. Mount. S. 5. Hoff. ii. 25—27. F. D. 212.
- Branches very long ru'bra. 11. S. Leaves lineari-lanceolate, acute. HUDS. — A
long, grey or purplish var. of S. viminalis, or monandra?
leaves 4 inches light green on Red Willow: Willow-beds. T. 4. 5. —
both sides
3. Leaves very entire, villous.
- leaves crisp or auril'ta. 12. S. Leaves villous on both sides, obovate, appendaged. S. caprea 3. HUDS.
wood above above greyish Round-eared W. Heaths. S. 5. 6. Hoff. i. 4. fol. i. 22.
- leaves on both land'ta. 13. S. Leaves woolly on both sides, roundish, acute.
silk, pubescent. — Vallies in Highl. Scotl. — 5. Fl. Ros. i. 81. 1.
- leaves above villous lappo'- 14. S. Leaves lanceolate, hirsute.
beneath densely woolly num. Lapland Willow. Highl. mount. S. 6. F. Dan. 1058.
- leaves below glaucous re'pens. 15. S. Leaves lanceolate, nearly naked on both sides
stem creeping. (Stigma 4-cleft, caps. smooth. E Bot.) S. repens 3. HUDS. S. depressa. HOFFM.
much silky, stem depressed Creeping W. Wet sandy heaths. S. 4. 5. E. Bot. 183
branches entangled —

- Var. 2. *S. repens*, a. Huds. Leaf downy on both sides. RAY syn. 447. 4. Park. 1435. 3.
16. *S. Leaves ovate, pubescent underneath.* *S. defusca.* Leaves above villous, beneath silky & shining. *Small branches silky & shining.*
- Sand Will.* Sea shores. *S. 5-7.* Hoff. ii. 28. 29.
17. *S. Leaves lanceolato-linear, stiff and straight, sessile (nearly), tomentous underneath.* *S. folia.* *branches many & straight-leaves 1 inch long*
- repens* a. Huds. *above pubescent. Stigmata*
- Rosemary-leaved W.* Wensledale. Park. 1435. *above pubescent. Stigmata*
4. *Leaves somewhat serrated, villous. dark purple.*
18. *S. Leaves ovate, wrinkled, tomentous underneath, undulated, toothed towards the end.* *caprea?* *branches shining*
- See *S. cinerea.* *small branches pubescent. capsule villosa*
- *F. Dan.* 245. Hoffm. i. 3. 5. 4. fol. i. 21. 1.
19. *S. Leaves ovato-oblong, tomentous underneath; acuminate.* *Branches, rather upper ones entire, lower ones crenate.* Hoff. smooth, leaves above light
- MILLER. *S. caprea* β. Lin. Huds. *green, mainly beneath*
- *Thickets, &c.* Hoff. i. 6. Ger. 1390. 4. *reddish.*
- Var. 2. *Leaves rounder and smaller.* See DILL. *reddish.*
- in R. 450. 17.
20. *S. Leaves oblongo-ovate, somewhat woolly underneath, stipules semi-cordate.* *S. caprea.* *cine'ra. Tree 30 feet*
- Huds. Lightf. *leaves green above red below*
- Sallow Willow.* Woods, &c. *S. 4.* *lower leaves not ticked*
- Obs. Withering informs us on the authority of Afzelius, that *S. caprea* Huds. Lightf. &c. is not *S. caprea* Lin. and refers it to *S. cinerea*.—And Willdenow considers *S. aurita* of Hoffm., and almost all authors, as belonging to this species.
21. *S. Leaves very nearly entire, lanceolato-linear, very long, acute, silky underneath; branches rod-like.* *(Leaves silvery underneath, nect- in the male flower long and slender, style in the fem. very long. Hoffm.)* *viminalis. Branches very long, silky, leaves 7 to 9 inches capsule silky.*
- Osier.* Boggy woods. *S. 4. 5.* Hoff. i. 2. i. 21. 2.
22. *S. Leaves lanceolate, acuminate, serrated, on both sides pubescent, the lowest serratures glandular.* *alba. Bark green, ament long and very slender*
- White W.* Hedge-rows. T. 4. Hoff. i. 7. & 8. i. 24. 3.

TRIANDRIA.

1100. EM'PETRUM. M. Cal. 3-parted. Cor. 3-petalled. Stam. long. *Stamens 3 or 4 long of perianth the other 3 stigma 3 rayed*
- F. Cal. 3-parted. Cor. 3-petalled. Styles 9. Berry 9-seeded.

Procumbent. nigrum. 1. E. Procumbent. (Flow. often monoicous, sometimes hermaph. VAHL.)
 Plant bald, leaves oblong
 Plant bald, edges turned over. Crane-berries. Moors. S. 4. 5. F. Dan. 975.
 Fringed - Bark falling off, inner bark yellow
 Corolla and anthers purple, berries black

TETRANDRIA.

1105. VISCUM. M. Cal. 4-parted. Cor. none.
 Filam. o. Anthers fixed to the calyx.
 Plant parasitic, shrubby or
 F. Cal. 4-leaved, superior. Style o. Cor. o.
 undershrubby - Leaves opposite
 Berry 1-seeded (pulpy, 1-celled). Seed
 cordate.

1. V. Leaves lanceolate, obtuse, stem dichotomous,
 spikes axillary.
 Sub green album.
 The new yellowish green
 recent flesh
 White Missel-toe, On trees. S. 5. Woodv. 270.

1106. HIPPOPHAE. M. Cal. 2-parted. Cor. o.
 F. Cal. bifid (tubular). Cor. o. Style 1.
 Berry 1-seeded (superior; Seed solitary,
 2-coated. E. Bot.).

Rhamnoi- 1. H. Leaves lanceolate.
 des. Sea Buck-thorn. Sandy sea sh. S. 4. 5. E. Bot. 425.

1107. MYRICA. M. Ament scale crescent-shap-
 ed. Cor. o.
 F. Ament scale crescent-shaped. Cor. o.
 Styles 2. Berry 1-seeded.

1. M. Leaves lanceolate, somewhat serrated; stem
 somewhat shrubby. (Male and fem. flowers
 on the same plant; sometimes on the same
 ament.)
 Ga'le, Sweet Gale, Moist heaths, S. 5. F. Dan. 327.

by distillation with water; powder or infusion vermifuge;

The Juice of the female hop is
 aromatic and bitter. - Stem

PENTANDRIA

1116. HUMULUS. M. Cal. 5-leaved. Cor. o.
 F. Cal. 1-leaved, expanding obliquely,
 entire. Cor. o. Styles 2. Seed 1, with-
 in a leafy calyx. (Fem. Ament of num-
 erous obliquely spreading undivided
 scales. E. Bot.) 3 kinds, greatly longish
 and oval hop.

1. HUMULUS.
 Com. Hop. Hedges. P. 6. 7. E. Bot. 427.

Under the liquor bitter and prevent it growing soon as soon as it
 would; and a tincture made with spirit of wine or brandy is
 more preferable to that of opium as a narcotic, altho inferior
 as an anaphrodisiac; young shoots eaten, resembling asparagus
 brechen or exhaust of the root, sudorific

apical - Herb - Leaves stipuled digitate green opposite, upper
 ternate male flowers on panicles axill. or terminal Female
 pile on the tops of herbs, with the rudiment of a new shoot
 above them - Stem macerated in water and steeped for its fibres used
 in dyes. **DIOECIA. HEXANDRIA.** Tamus 221 *green and*
per - seeds boiled in milk for coughs and the jaundice also
to cure birds and fowls to say 258; and brewed for use

HEXANDRIA.

1119. TA'MUS. M. Cal. 6-parted. Cor. o. *Root black, very large*
 F. Cal. 6-parted. Cor. o. Style 3-cleft. *Stem brachy, round*
 Berry 3-celled, inferior. Seeds 2 (in *2 feet long, smooth*
green from green, male to sagittate flowers
each cell). *greenish, berries as*
 1. T. Leaves cordate, undivided. *communis.*
 Black Bryony. Woods. P. 6. E. Bot. 91. *Root acrid, stimulant*
Mild vine, on Ladus dear *Dicentric used ext.*

OCTANDRIA.

1123. POP'ULUS. M. Cal. scale of an Ament,
 lacerated. Cor. turbinate, oblique,
 entire.
 F. Cal. and Cor. as in the male. Stigm.
 4-cleft. Caps. 2-celled. Seeds many,
 pappous.
1. P. Leaves roundish, dentato-angular, tomentous al'ba. *Branches horrid*
underneath. Show white *leaves above black green*
 White Poplar. Hedges. T. 3. Hunt. i. p. 201. *beneath very densely*
 Var. 2. Leaves smaller. RAY syn. 446. 2. Ger. *woolly - Ament 1 inch*
 1487. 5.
2. P. Leaves roundish, dentato-angular, smooth on trem'ula.
 both sides.
 Aspen. Moist woods. T. 3. 4. Ger. 1487. 3.
3. P. Leaves deltoid, acuminate, serrated (smooth ni'gra. *Tree tall, smooth*
 on both sides, stamens 16). *leaves dark green*
 Black Poplar. Shady places. T. 3. Ger. 1486. 2.
1124. RHODI'OLA. M. Cal. 4-parted. Cor. 4-
 petalled.
 F. Cal. 4-parted. Cor. o (4 rude pe-
 tals). Nect. 4. Pist. 4. Caps. 4,
 many-seeded.
1. RHODIOLA. *leaves small, make serrated at base* *Flowers corymbose*
 Yellow Rose-wort, Mount. P. 6. 7. F. Dan. 183. *capitate yellow*
Delicious stone crop *Root tuberos, and*
 Obs. Dahl has often found this plant hermaph., and as the
 male flow. are frequently decandrous, and the fem. pen-
 tagynous, thinks it should be referred to the genus
 Sedum.

Mere Perennier - Mildly Capitate, when boiled as greens, but
 a can has occurred in which being eaten fried with bacon
 it produced hypercalcaemia and convulsions, and was fatal to
 three children, but their parents escaped
 222 DIOECIA. ENNEANDRIA. Mercurialis.

ENNEANDRIA.

- Flowers with long, pedicels* 1125. MERCURIA' LIS. M. Cal. 3-parted. Cor. o.
Root creeping & much branched Stam. 9-12. Anth. globular, didymous.
stem 18 inches high the upper F. Cal. 3-parted. Cor. o. Styles 2. Caps.
 2-celled, 1-seeded.
Stem densely perenn'is. 1. M. Stem undivided, leaves rough.
leaves Dog's Mercury. Hedges, &c. P. 4. 5. Curtis.
Root fibrous an' nua. 2. M. Stem brachiate, leaves smooth, flowers spiked.
Herb light green shining (Stem much branched, internodes incrassated,
 leaves lucid.)
and foetid - mucilaginous French Mercury, Rubbish. A. 8. 9. Curt. 336. 1. 2.
and in glysters, juice takes away warts 1126. HYDROCHARIS. M. Spathe 2-leaved.
Herb floating knotted, stolonifer. Cal. 3-cleft. Cor. 3-petalled. Filam.
 3 inner ones style-bearing.
floats leaf & flower bearing F. Cal. 3-cleft. Cor. 3-petalled. Styles 6.
leaves petioled in bundle. fls. white Caps. 6-celled, many-seeded, inferior.
 Mor'sus 1. HYDROCHARIS. - *Leaves kidney shaped float*
 ra'nae. Com. Frog-bit. Slow streams. P. 6. Curt. 167.

MONADELPHIA.

1134. JUNIP'ERUS. M. Cal. scale of the Ament.
 Cor. o. Stam. 3.
 F. Cal. 3-parted. Pet. 3. Styles 3. Ber-
 ry 3-seeded, with 3 tubercles of the un-
 equal calyx. (Drupa juicy, closed, 1-
 celled, many-seeded. WITH.)
Shrub very commu'nis. 1. J. Leaves 3-together, spreading, mucronate, long-
 er than the berry.
much branched, stiff Juniper Tree. Heaths, &c. S. 5. Woody. 95.
leaves glaucous above Var. 2. B. Huds. Smaller leaf broader, fruit
male & female solitary longer. Ray syn. 444. 2.
ovate yellow Mountain Dwarf J. Snowdon. Ger. 1372. 3.
Female cone fleshy 1135. TAX'US. M. Cal. a 4 or 7-leaved bud.
globular Cor. o. Stam. many. Anth. peltate, 8-
 cleft.
 F. Cal. a 4 or 7-leaved bud. Cor. o. Style o.
 Seed 1, with a berry-like very entire
 calycle.
 Obs. Lin. makes the Calyx 3-leaved in Syst. Veg.

- bacca'ta. 1. T. Leaves approximate. 2 united, close together
 Com. Yew-tree, Mount. woods. T. 3. 4. Hunt. i. 257.

Juniperus - The fleshy cone of the female is diuretic, and
 used to fluxion. *Spartium liguans* - Wood burned as an
 antiseptical - Charcoal covered with ashes retains fire

SYNGENESIA.

1199. Ruscus. M. Cal. 6-leaved. Cor. o.
Nect. central, ovate, perforated at the
top. (Anth. 3.)

F. Cal. Cor. and Nect. as in the male.
Style 1. Berry 3-celled. Seeds (gen-
erally) 2.

1. R. Leaves flower-bearing above, naked.

Butcher's Broom. Thickets. S. & 4. Woodv. 237.

Knee holly - Peltigera -

aculeatus. Flowers cup

separated female

naked, male on the side

sessile anthers - Root horizontal

Herbaceous stiff, evergreen, much

branched. Leaves ribbed alternate

pergent. Flowers white

Root apertures -

Page 220

Viscum album - leaves used against Epilepsy and
other spasmodic diseases, also against the scab in sheep.
The bark and berries yield birdlime propagated by
ribbing the berries on the bark of trees so, to make
them adhere - The *viscum quercus* of the ancient
Druids, to which many magical properties were
attributed is supposed by De Candolle, not to be the
same, but the *Loranthus*, because he has never found
the *viscum* growing upon oak, although common in the
countries formerly devoted to the Druidical religion;
and the *Loranthus* grows commonly on the indigenous
oaks of Italy and is then taken for the *viscum*; so
that it is probable the *Loranthus* formerly grew on the
oaks in the Druidical countries, but was extirpated
by them from the great use made of it in their religious
rites.

CLASS XXIII.

POLYGAMIA.

Richard says this is a confused mixture of plants hardly all belonging to other different classes.

MONOECIA.

146. *Hol'cus*. Hermaph. (Cal.) Glume 1 (to 3)-flowered. (Cor.) Glume 2-valved. Stam. 3. Styles 2. Seed 1.
Male. (Cal.) Glume 1-flowered. (Cor.) Glume 2-valved. Stam. 3.
1150. *Æ'giops*. Hermaph. (Cal.) Glume 3-flowered. (Cor.) Glume 3-awned. Stam. 3. Styles 2. Seed 1.
Male. (Cal.) Glume 3-flowered. (Cor.) Glume 3-awned. Stam. 3. (Flow. intermediate.
1151. *Valan'tia*. Herm. Cal. o. Cor. 4-parted. Stam. 4. Style bifid. Seed 1.
Male. Cal. o. Cor. 3 or 4-parted. Stam. 3 or 4.
1152. *Parieta'ria*. Herm. Cal. 4-cleft. Cor. o. Stam. 4. Style 1. Seed 1.
Fem. Cal. 4-cleft. Cor. o. Style 1. Seed 1.
1153. *At'riplex*. Herm. Cal. 5-leaved. Cor. o. Stam. 5. Style bifid. Seed 1.
Fem. Cal. 2-leaved (larger). Cor. o. Style bifid. Seed 1.
- (I. *Callitriche verna*. III. *Avena elatior*. *Hordeum murinum*, *pratense*, et *maritimum* Rottboella.
XII. *Euphorbia Portlandica*, et *Characias*.
XXI. *Lemna*. *Myriophyllum verticillatum*.)

DIOECIA

1160. *Frax'inus*. Herm. Cal. o, or 4-parted. Cor. o, or 4-petalled. Stam. 2. Pist. 1. Seed 1.
Fem. Cal. o, or 4-parted. Cor. o, or 4-petalled. Pist. 1. Seed 1.

(I. *Callitriche verna*. IV. *Ilex*. V. *Pimpinella*
dioica. XIII. *Stratiotes*.

MONOECIA.

1146. *Holcus*. Herm. Cal. Glume 1, or 2 (to 3)
-flowered. Cor. Glume awned (Awn
twice as long as the corol.) Stam. 3.
Styles 2. Seed 1.
Male. Cal. Glume 2-valved. Cor. o.
(Awn as long as the corol. WITH.)
Stam. 3.
1. H. Glumes 2-flowered, villous, hermaph. floret
awnless; male with a recurved awn (enclosed
in the calyx. Sheath loose, striated, villous.)
Meadow Soft Grass. Meadows. P. 6. 7. Curt. 228.
lana'tus. Awn of the upper
flower recurved, bent back
leaves broad, pubescent
sheaths woolly
2. H. Glumes 2-flowered, rather naked, hermaph.
floret awnless; male with a geniculate awn.
(Calyxes more acute, roots creeping, joints
woolly, awn protruding out of the calyx.
CURTIS.) *mollis*. Awn of the upper flower
bent. Culm loosely
roots creeping, out
leaves pubescent. Sheath smooth
- Obs. Both the florets are hermaph. one on a pedicle, awned,
hairy at the base, awn twice as long as the cor., the other
sessile, awnless, not hairy at the base.
- Creeping Soft Grass. Woods. P. 7. 8. Curt. 323.
3. H. Cal. 2-flowered; awn of the male floret ge-
nulate, dorsal. GMEL. See *Avena elatior*.
avena'ceus.
1150. *Ægilops*. Herm. Cal. glume mostly
3-flowered, cartilaginous. Cor. glume
terminated by a triple awn. Stam. 3.
Styles 2. Seed 1.
Male. Cal. and Cor. glume as in the
former. Stam. 3.
1. *Æ*. Spike subulate, awnless, smooth, incurved, *incurva'ta*. Culm rather
calyxes 1-flowered. See *Rottbollia incurvata*. *compressa* smooth
Page 29. *Fields near the sea* *sheath recurved at
bottom - sheath smooth*
1151. *VALAN'TIA*. Hermaph. Cal. o. Cor. 4-
parted. Stam. 4. Style bifid. Seed 1.
Male. Cal. o. Cor. 3 or 4-parted. Stam.
4 or 3. Pist. indistinct.
1. V. Male flowers 4-cleft, peduncles 2-leaved. *Crucia'ta*. *Flower simple*
Galium cruciatum. With. E. Bot. See page 35. *Leaves*
35. *form on a whit oval 3 ribbed, soft light green peduncle*
Crosswort. Hedges. P. 5-7. E. Bot. 143. *two leaved - flowers corymb*

Parietaria - leaves threaded in garlands to drive away
 vermin - juice diuretic - contains mucus sometimes in con-
 siderable quantity.

1152. *PARIETARIA*. Herm. Cal. 4-cleft. Cor. o.
 Stam. 4. Style 1. Seed 1, superior,
 elongated.

Fem. Cal. 4-cleft. Cor. o. Stam. o. Style
 1. Seed 1, superior, elongated.

Stem much officinalis. 1. P. Leaves lanceolato-ovate, peduncles dichoto-
 mous, calyxes 2-leaved. (Fem. flow. 4-corner-
 ed, pyramidal.) - *Walls and moun-*
pellitory of the Wall Walls. P. 5-9. Curt. 233.
black-green

1153. *ATRIPLEX*. Herm. Cal. 5-leaved. Cor. o.
 Stam. 5. Style 2-parted. Seed 1, de-
 pressed.

Fem. Cal. 2-leaved. Cor. o. Stam. o.
 Style 2-parted. Seed one, compressed
 (erect).

Rock woody stem 18 inches 4 1/2
Flowers yellowish
Stem shrubby portula-
 cot' des. 1. A. Stem shrubby, leaves obovate. *powdery flowers*
Stem pubescent at top lacinia'ta. 2. A. Stem herbaceous (spreading), leaves deltoid,
 toothed, silvery underneath.
Rock pithous *hastata*. 3. A. Stem herbaceous (erect, somewhat compress-
 ed), calyx-valves of the fem. flowers large, del-
 toid, sinuated. (Leaves triangular, sinuated.
 PERS.)

Wild Orache. Rubbish. A. 8. 9. Curtis.

Var. 2. 3. Huds. Perennial, leaf deltoid or trian-
 gular, less hoary. H. ex. 2. 607. 19.

— 3. 7. Huds. Procumbent, leaves scarcely
 sinuated, appendaged at the base. J.B. ii. 974. 2.
 See Dill. in R. 152. 7.

Fruit thorny pat'ula. 4. A. Stem herbaceous, (somewhat 4-cornered) pa-
 tulous, leaves somewhat deltoideo-lanceolate,
on the Disk leaves alternate
Stem branched very much
Herb used as a potherb
 calyx of the seeds toothed on the disc.

Spear Orache. Rubbish. A. 8. Ger. 326. 7.

Var. 2. 3. Huds. Stem herbaceous, leaves has-
 cate, toothed. — Stems firmer and thicker, leaves
 long, narrow, laciniated. DILL. in R. 152. 4.

littoralis. 5. A. Stem herbaceous, erect, leaves all linear, very
 entire (or serrated. Woodw.) *powdery below*

Var. 1. 2. Huds. Leaf very long and narrow. See
 Dill. in R. 153. 12.

Grass Orache. Sea shore, &c. A. 8. Pet. 7. 6.

Var. 2. 3. Huds. Very small, narrow-leaved.
 H. ex. 5. 32. 20.

— 3. 7. Huds. Narrow-leaved, leaf more ob-
 tuse. DILL. l. c.

— 4. Leaves toothed. Pet. 7. 4. See With.

Stem Pseudoplatanus - Wood soft very white, used for turnery.
Juice saccharine, affords sugar by evaporation

POLYGAMIA. MONOECIA. Atriplex.

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6. A. Stem herbaceous, (branches) diverging; peduncles - *Herb. pendulous*
 leaves lanceolate, obtuse, entire, fem. calyxes *lat'a. mostly Stem 3*
 peduncled. *inches, angular*

Stalked Orache. Sea shores. A. 7—9. E. Bot. 232.

Var. 2. β . Huds. Leaves small. RAY syn. 153.9.

1155. A' CER. Herm. Cal. 5-cleft. Cor. 5-pe-
 talled. Stam. 8. Pist. 1. Caps. 2
 or 3, 1-seeded, terminated by a wing.
 Male. Cal. 5-cleft. Cor. 5-petalled.
 Stam. 8.

1. A. Leaves 5-lobed, unequally serrated, flowers *Pseu-do- Robinia platanus*
 racemous. (Racemes pendulous.) *when treated by*
moisture & valued
 Sycamore Tree. Hedges. T. 5. 6. E. Bot. 303. *red velvet hairy, stygmata*
 Var. 2. Leaves glaucous, distantly serrated, fi- *dumy*
 lam. hairy. SMITH.
 2. A. Leaves lobed, obtuse, emarginate. (Flow. in *campes' tre.*
 upright clusters. E. Bot.) *Dark cork-like, seed wing much of fruit*
 Com. Maple. Hedges. S. 6. E. Bot. 304. *reddish*
 Var. 2. β . Huds. Fruit villous, red; wings red- *fructificae ~ 228*
 dish purple. See Dill. in R. 470. 3.

DIOECIA.

1160. FRAX'INUS. Herm. Cal. 0, or 4-parted.
 Cor. 0, or 4-petalled. Stam. 2. Pist.

1. Seed 1, lanceolate.

Fem. Pist. 1, lanceolate.

1. F. Leaves serrated, flowers apetalous. *excell' sior.*

Com. Ash Tree. Woods. T. 4. 5. Hunt. i. p. 145. *Dark grey, buds black*
Branches upright or ascending - Male & female flower on separate
tree, rarely on the same. Seed pendulous, cotyledons leaf-like, which
have plumule inconspicuous -

Wood an excellent timber. Used also for long handles on
 shafts, bark and wood dimetric, and lithontriptic. Seed pods
 called ash-keys, bird's tongue, kite-keys, sparrow-tongues; acorn and better
 for decoction used in diseases of the liver; tops and leaves used
 to feed cattle in winter and dry summer, but they spoil the taste of
 the milk, if eaten by cows, bark used in tanning. Leaves to the tip in
 Decr. a good purgative. Tip of bark or tip of leaves
 used to cure agues.

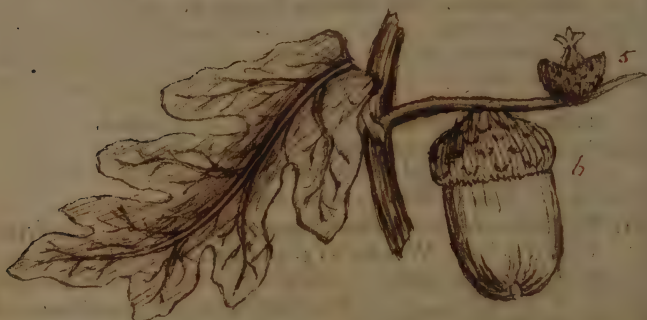
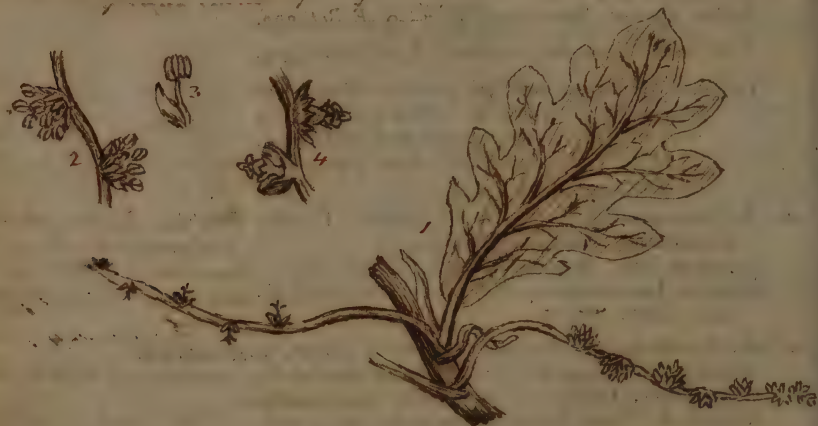
1. Seed pod opened before it is ripe, it has three
 cells and 4 seedlings, ranging two side by side in
 each cell.

2. Seed pod opened, when it is ripe, it has
 only one seed, pendulous, the others having
 perished.





Acer camppestre a Perfect flower b Fertile flower c Fruit



Quercus Robur 2 Branch flowers magnified 3 Stamen and its corresponding scale magnified 4 Fertile flowers magnified 5 Fertile flower after impregnation 6 Acorn and its cup

Quercus

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Spent 2 1/2 hours at
Hempstead - about Highgate

1. *Phacelaria* } 1. 2. *Phacelaria* - *Phacelaria* *Phacelaria*
 2. *Phacelaria* } 1. 2. *Phacelaria* - *Phacelaria* *Phacelaria*

Laurel Bay, New York

March 7. 0 March at Fort -
 at Fort - about 1000
 at Fort - about 1000
 at Fort - about 1000

Onoclea sensibilis 2, 5
 New York - near Cayman
 City of Albany
 About Coulton. Copie near
 People's Park near the
 Popo'sharten hills - Present in
 dense woods (near the hills). Near
 on left before we came to the hills
 Caen road house - Road about 1/2 mile
 road at which we found
 Smith's Road 5.6 Copie near
 On Sol Seal

Polygonatum 3, 6
 Caen road house

Polygonatum 3, 6
 Caen road house

Paris 10/15 5, 6 - Charlton Hanging road
 Chelsea - Chiselhurst - Long road in
 Chiselhurst - Caen road
 Old park road near Chiselhurst
 Antwood & S. Antwood

Paris 10/15 5, 6
 Caen road

Road on Forest hill - New York
 Common about the mountain
 Top hills - Charlton hills
 Dense woods (near the hills) - Road about
 out end of the road - about 1/2 mile
 Riding Road - Caen road & Chiselhurst

... 5 May ...
... 6 inch leaves ...
... (May June) ...

... May ...
... 1 foot ...
... May ...

... May 12 ...
... 3 sides ...
... 2 feet ...
... May ...
... Banks of ...

... May ...
... angular ...
... Banks of ...
... May ...

... May 3 ...
... 10 ...
... May ...
... (Banks)

Sarcocolla May Between Bolton and Slough
Cut in 10 inch. flowers white In Linn's Park n. West of
Leycester Fields opposite base of Bolton

Dioclea May Between Slough & Woolwich
Tall narrow stem In the marshes (n. near Slough)
comes from a pale dry ditch in places about 5 ft. - 6 ft. tall
at Slough - 1st of 2nd

Charitum May In the marshes at back of
Chariton Lake - dry wood Charlton Church - Charles n. of
Havering

Ranunculus Bogs about Chiswick

Muricata May about Highgate
Culm 10 inch. spike 6 to 8. - parted

Scilla May 1st. Heathfield com.

Lilium May By the mill pond at Heathfield
Single spike 2 lanceolate leaves
Lilium - 3 others in 1st row

Acuta May 15
Slender spike

Præcox May 7
Slender spike

Shigosia May 21
Loose head yellow

Stellaria May 21
Slender spike

alluvium from sea bridge to Matteson
meadow

Eden lat. 101.25 y Mumbledon com - Main river
lat. 101.25 y Mumbledon com - Main river
Dad: arms and Mumbledon - at 1.00 feet
Shes

200 ft. 101.25 - y Mumbledon com - Balthasar - Bank
of Canal between D. Arms and Mumbledon

"Dungen" ram. 101.25 y Mumbledon com - Balthasar - Bank
of Canal between D. Arms and Mumbledon
Balthasar - Bank
Thames River
sing - y Mumbledon com - Balthasar - Bank

Rever's Col. 101.25 y Mumbledon com - Balthasar - Bank
river bank
In the river, the 1.00 ft. often in the river
about 100 ft. - In the river, the
1.00 ft. (100 ft) - Lane between Balthasar
and Chichester, near Chichester
Find in a bank leading from the Balthasar
Road to Chichester - Balthasar
Hampshire - Balthasar
Near Norfolk Church - Balthasar

Balthasar - Balthasar - Balthasar
Lane from Lane road to Chichester
Balthasar

Lowell's 101.25 y Culm 101.25 y 18 inches high
lateral 101.25 y Mumbledon com
handwork com - Balthasar - Balthasar
Balthasar

Union 101.25 y Culm 101.25 y 18 inches high
lateral 101.25 y Mumbledon com
handwork com - Balthasar - Balthasar
Balthasar

Lowell's 101.25 y Culm 101.25 y 18 inches high
lateral 101.25 y Mumbledon com
handwork com - Balthasar - Balthasar
Balthasar

Eden 101.25 y Culm 101.25 y 18 inches high
lateral 101.25 y Mumbledon com
handwork com - Balthasar - Balthasar
Balthasar

Ceratophyllum - Flowers about Hants - 8.9
Hippocrepis vulgaris - (Bathurst) - 10' Round Road - 4.6
 (near at Hantsfield, in the hedge near
 about Hants)

Myrica sp. *trinitatis* - 5.8
 (near Hants) - Between Hants and Hants - Hants
 (near Hants) - About Hants + near Hants - Hants

near Bathurst - 6.7 Between Hants and
 (near Hants) - (near Hants) - Hants
 (near Hants) - (near Hants) - Hants
 (near Hants) - (near Hants) - Hants

Samolus - 5.8 High bank near Hants - Hants
 (near Hants) - (near Hants) - Hants
 (near Hants) - (near Hants) - Hants
 (near Hants) - (near Hants) - Hants

Lupinus see prospectus
Salix see prospectus
Populus see prospectus

(near Hants) - (near Hants) - Hants
 (near Hants) - (near Hants) - Hants

Prunella - Shrub Copse near Hants

Between Hants and Hants
 on bank of Hants -

Carthamus *Betula* - Hants - (near Hants)
 (near Hants) - (near Hants) - Hants

Compositae - Hants - (near Hants)
 (near Hants) - (near Hants) - Hants

Ficus *castanea* - Hants

Sylvestris - (near Hants)
 (near Hants) - (near Hants) - Hants

from

Dear




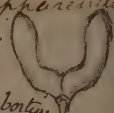

Yours truly








act - 1000





Acer pseudoplatanus, Apr. 20. Pollen not yet ripe
 Capsule  with two ^{or three} linear ovules &
 ovules in each cell.  The disk is large
 surrounding the capsule it is mammillated with
 5 or 6 double lobes the filaments arising from between
 them. — May 3rd Pollen of this shape apparently
 in the valve.  May 20th Capsule of this shape 
 The seed, fixed as represented:
 one of the ovules having become abortive
 the capsule is filled with a white cottony transparent
 and simple tissue

Acer leucodermis — May 10. Pollen not yet ripe
 in the valve.  Capsule of this
 shape  ovules two in each cell not
 quite fully formed (May 4)

Acer cornutum — May 10 — Shape of Capsule 
 Ovules yet very minute
 May 20th The capsule as here represented 
 there are yet two ovules in each division of
 the capsule the hollow has not yet any cottony matter
 This appears to be the shape of the ovule and
 Placentae — June 4th There are still two ovules in
 each capsule

about 29. Antennae just young. 6-segmented.
from the black body - about 12th Nov -
taller than - Pollen 2 of this shape
like a C. with 2 in some trees

Fraxinus excelsior May 20. The anthers are fallen
the germens a little enlarged it has two
cells and two pendant outer side by side in
each -

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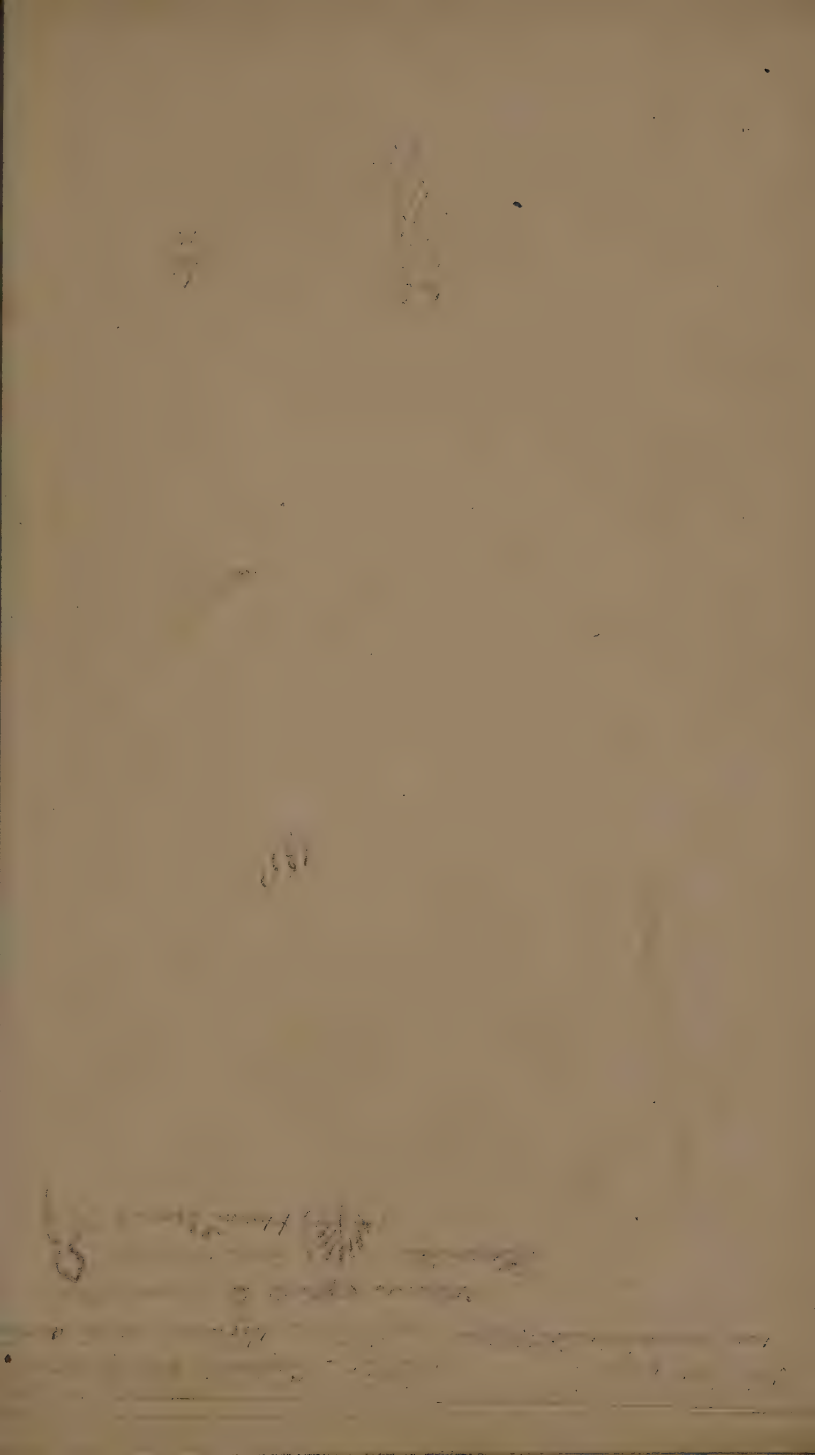
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sup. other species a great one came
 about 1/2 inch long and 1/2 inch wide
 and was very soft - brown
 and very much like the
 one I found in the
^{upright} *glumellus* the

Harris
 separate
 Mesozoic or
 Cenozoic
 found at margin in ^{shells}
Graminales


seed (caricoid) -


Chorus has hairs
Dolysmus - hairs
Rhynchospora hairs
Eleocharis hairs
Eriophora hairs
Eriophora hairs






July - April 16

Quicks very low and extraordinary
when Botany Bay was attacked
by one of the ships to the base of the island
was surrounded by two more

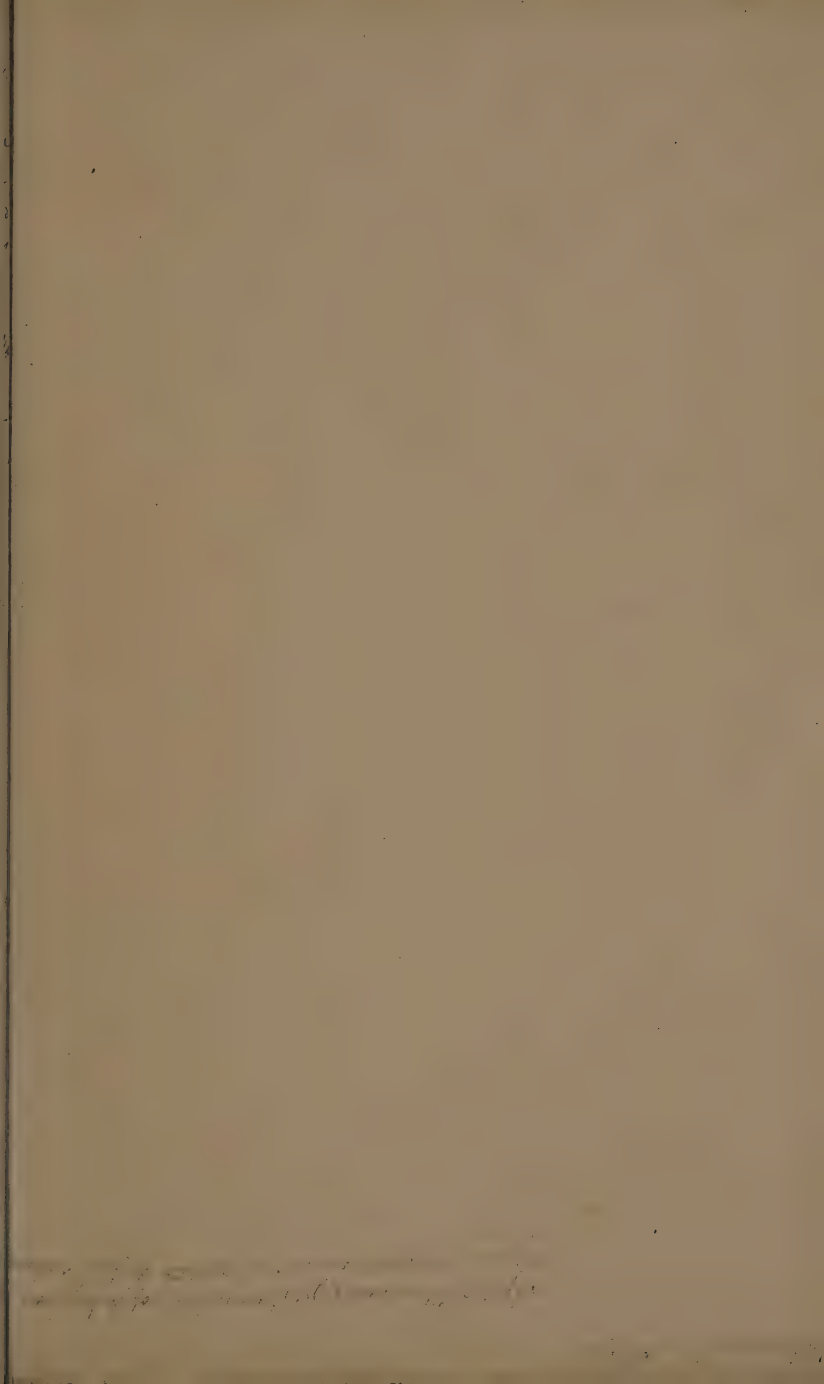
Euphorb. amyg. l. - April 16 - Flow. Hermaph. petals in cross and
wood spine - three long-tubed stamens - three pendent
ovules nearly round. 

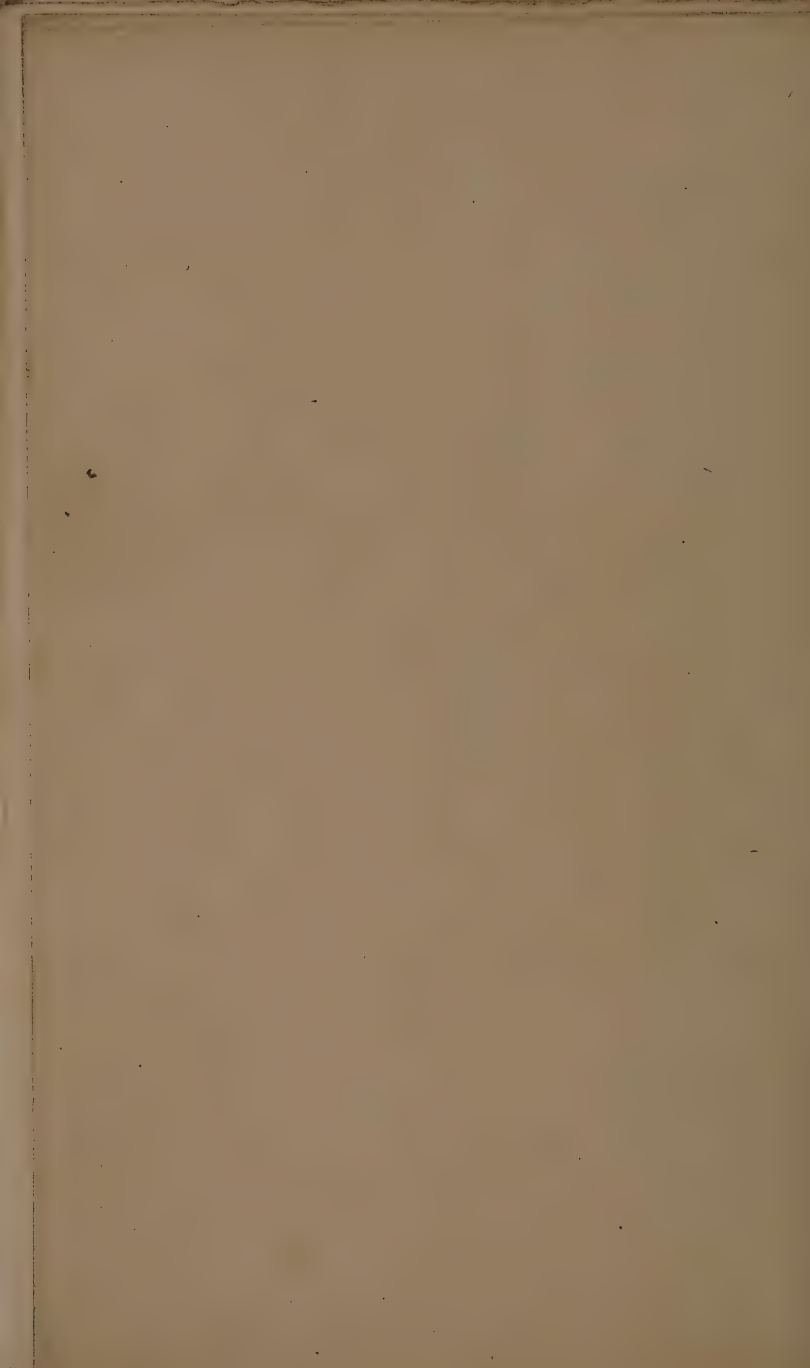
Euphorb. (Helioscopia?) - Bottom of this figure
The capsule smooth and as it ripens
it enlarges its gynophore lengthwise so as
allow it to curve over the flower. The ovule is
of this shape  the upper part is the triangular
radial, as the seed ripens the surface becomes
brown colour and wrinkled in irregular square
figures, the arillus continuing of a yellow, resin colour

Saxifraga granulata - Pollen oval apparently with a
longitudinal valve. Germen half
super, & half infer? attached to the calyx by
loose cellular membrane, easily separated, it
consists of two capsules round on the outer side
and flat where they join; they join by loose cellular
membrane - The surface where they join is nictular and
forms a broad extended placenta, from whence the ovules
rise without any funiculus, as & are innumerable - The
seeds are minute, but the raphe is very distinct. 
The stigma is open at top  and furnished with minute capilla.
The seeds are covered with small tubercles -
The stem covered with hairs having a small gland at
the extremity -

Didactylis - The capsules in the same form
more or less - The ovules disposed in the same
manner as above.
on the ground?  on the ground?







PLAN
OF A PROPOSED
NEW MAGAZINE,
TO BE DEVOTED EXCLUSIVELY TO
ZOOLOGY AND BOTANY.

SIR,

It appears to the proposers of this New Periodical that there is at present a great want of some Work wherein the progress and discovery of ZOOLOGY and BOTANY can be regularly communicated; that there is now no such Work in course of publication, for the many existing periodicals, otherwise excellent, are either devoted to a more extensive range of subjects, or are conducted upon a plan more suited to gain popularity than to advance science; that there is a rising band of young and zealous scientific Naturalists, who want some medium for the regular publication of their researches, and whose communications and subscriptions would amply support a Magazine conducted upon truly scientific principles.

To endeavour to supply this blank in our Zoological and Botanical Literature, "THE MAGAZINE OF ZOOLOGY AND BOTANY" is proposed. It will be devoted exclusively to those branches of Natural Science, and will be entirely under the superintendence of SIR W. JARDINE, Bart., P. J. SELBY, Esq., and DR. JOHNSTON of Berwick. It will be published on the First Day of every Second Month. Each Number will contain Six Sheets of Octavo Letter-press, with illustrative Plates and Woodcuts. Its Price, per Number, will be 3s. 6d. or 1l. 1s. yearly. The outline of its plan is proposed to be:—

SECTION I. ORIGINAL PAPERS.—Monographs; History of any particular Class; Description of Species; Details of Anatomical Structure; Disquisitions on the Habits, Affinities, and Distribution of Animals and Plants; Essays on Nomenclature; Biographies.

4.10.16.50.61.79.93.102.9.124.5.6.7.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100.101.102.103.104.105.106.107.108.109.110.111.112.113.114.115.116.117.118.119.120.121.122.123.124.125.126.127.128.129.130.131.132.133.134.135.136.137.138.139.140.141.142.143.144.145.146.147.148.149.150.151.152.153.154.155.156.157.158.159.160.161.162.163.164.165.166.167.168.169.170.171.172.173.174.175.176.177.178.179.180.181.182.183.184.185.186.187.188.189.190.191.192.193.194.195.196.197.198.199.200.201.202.203.204.205.206.207.208.209.210.211.212.213.214.215.216.217.218.219.220.221.222.223.224.225.226.227.228.229.230.231.232.233.234.235.236.237.238.239.240.241.242.243.244.245.246.247.248.249.250.251.252.253.254.255.256.257.258.259.260.261.262.263.264.265.266.267.268.269.270.271.272.273.274.275.276.277.278.279.280.281.282.283.284.285.286.287.288.289.290.291.292.293.294.295.296.297.298.299.300.301.302.303.304.305.306.307.308.309.310.311.312.313.314.315.316.317.318.319.320.321.322.323.324.325.326.327.328.329.330.331.332.333.334.335.336.337.338.339.340.341.342.343.344.345.346.347.348.349.350.351.352.353.354.355.356.357.358.359.360.361.362.363.364.365.366.367.368.369.370.371.372.373.374.375.376.377.378.379.380.381.382.383.384.385.386.387.388.389.390.391.392.393.394.395.396.397.398.399.400.401.402.403.404.405.406.407.408.409.410.411.412.413.414.415.416.417.418.419.420.421.422.423.424.425.426.427.428.429.430.431.432.433.434.435.436.437.438.439.440.441.442.443.444.445.446.447.448.449.450.451.452.453.454.455.456.457.458.459.460.461.462.463.464.465.466.467.468.469.470.471.472.473.474.475.476.477.478.479.480.481.482.483.484.485.486.487.488.489.490.491.492.493.494.495.496.497.498.499.500.501.502.503.504.505.506.507.508.509.510.511.512.513.514.515.516.517.518.519.520.521.522.523.524.525.526.527.528.529.530.531.532.533.534.535.536.537.538.539.540.541.542.543.544.545.546.547.548.549.550.551.552.553.554.555.556.557.558.559.560.561.562.563.564.565.566.567.568.569.570.571.572.573.574.575.576.577.578.579.580.581.582.583.584.585.586.587.588.589.590.591.592.593.594.595.596.597.598.599.600.601.602.603.604.605.606.607.608.609.610.611.612.613.614.615.616.617.618.619.620.621.622.623.624.625.626.627.628.629.630.631.632.633.634.635.636.637.638.639.640.641.642.643.644.645.646.647.648.649.650.651.652.653.654.655.656.657.658.659.660.661.662.663.664.665.666.667.668.669.670.671.672.673.674.675.676.677.678.679.680.681.682.683.684.685.686.687.688.689.690.691.692.693.694.695.696.697.698.699.700.701.702.703.704.705.706.707.708.709.710.711.712.713.714.715.716.717.718.719.720.721.722.723.724.725.726.727.728.729.730.731.732.733.734.735.736.737.738.739.740.741.742.743.744.745.746.747.748.749.750.751.752.753.754.755.756.757.758.759.760.761.762.763.764.765.766.767.768.769.770.771.772.773.774.775.776.777.778.779.780.781.782.783.784.785.786.787.788.789.790.791.792.793.794.795.796.797.798.799.800.801.802.803.804.805.806.807.808.809.810.811.812.813.814.815.816.817.818.819.820.821.822.823.824.825.826.827.828.829.830.831.832.833.834.835.836.837.838.839.840.841.842.843.844.845.846.847.848.849.850.851.852.853.854.855.856.857.858.859.860.861.862.863.864.865.866.867.868.869.870.871.872.873.874.875.876.877.878.879.880.881.882.883.884.885.886.887.888.889.890.891.892.893.894.895.896.897.898.899.900.901.902.903.904.905.906.907.908.909.910.911.912.913.914.915.916.917.918.919.920.921.922.923.924.925.926.927.928.929.930.931.932.933.934.935.936.937.938.939.940.941.942.943.944.945.946.947.948.949.950.951.952.953.954.955.956.957.958.959.960.961.962.963.964.965.966.967.968.969.970.971.972.973.974.975.976.977.978.979.980.981.982.983.984.985.986.987.988.989.990.991.992.993.994.995.996.997.998.999.1000.1001.1002.1003.1004.1005.1006.1007.1008.1009.1010.1011.1012.1013.1014.1015.1016.1017.1018.1019.1020.1021.1022.1023.1024.1025.1026.1027.1028.1029.1030.1031.1032.1033.1034.1035.1036.1037.1038.1039.1040.1041.1042.1043.1044.1045.1046.1047.1048.1049.1050.1051.1052.1053.1054.1055.1056.1057.1058.1059.1060.1061.1062.1063.1064.1065.1066.1067.1068.1069.1070.1071.1072.1073.1074.1075.1076.1077.1078.1079.1080.1081.1082.1083.1084.1085.1086.1087.1088.1089.1090.1091.1092.1093.1094.1095.1096.1097.1098.1099.1100.1101.1102.1103.1104.1105.1106.1107.1108.1109.1110.1111.1112.1113.1114.1115.1116.1117.1118.1119.1120.1121.1122.1123.1124.1125.1126.1127.1128.1129.1130.1131.1132.1133.1134.1135.1136.1137.1138.1139.1140.1141.1142.1143.1144.1145.1146.1147.1148.1149.1150.1151.1152.1153.1154.1155.1156.1157.1158.1159.1160.1161.1162.1163.1164.1165.1166.1167.1168.1169.1170.1171.1172.1173.1174.1175.1176.1177.1178.1179.1180.1181.1182.1183.1184.1185.1186.1187.1188.1189.1190.1191.1192.1193.1194.1195.1196.1197.1198.1199.1200.1201.1202.1203.1204.1205.1206.1207.1208.1209.1210.1211.1212.1213.1214.1215.1216.1217.12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SECTION IV. INTELLIGENCE.—Zoological and Botanical; Discovery and Notices of new or rare British Animals and Plants; Discovery and Notices of new or rare Animals and Plants, not British; Notices of Tours and Travellers; Biographical Notices; Proceedings (Zoological and Botanical) of Societies; Appointments to Professorships, Lectureships, &c.; Obituary.

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W. JARDINE.

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